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Canadian Atlantic Fisheries
Scientific Advisory Committee

CAFSAC Research Document 86/23

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Comité scientifique consultatif des
pêches canadiennes dans l'Atlantique

CSCPCA Document de recherche 86/23

Status of Atlantic Salmon (*Salmo salar* L.) Stocks of the Newfoundland Region, 1985

by

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Abstract

The 1985 commercial catch of small salmon (preliminary data) increased over 1984 but remained below the 1974-84 and 1980-84 means for both the insular Newfoundland and Labrador portions of the Newfoundland Region; landings of large salmon declined from 1984 and the means for both the island and Labrador. The 1985 recreational catch of grilse increased over 1984 and the two means for the island while for Labrador the catch was essentially the same as for 1984 but below the means. The 1985 recreational catch of large salmon in Labrador decreased from 1984 and both means. Counts of grilse in 1985 increased over 1984 for all fishways while the reverse was true for large salmon in most cases. Overall concurrent increases in commercial and recreational catches as well as fishway counts suggest that the abundance of small salmon in 1985 was higher than in 1984 for the island. There is a suggestion from commercial catches that the overall abundance of large salmon in 1985 was lower than in 1984 for both the island and Labrador; for the island, this is supported somewhat by the low counts of this component at fishways in 1985 compared to 1984. There is evidence to suggest that anomalous severe ice conditions with attendant effects on water temperature altered the distribution and delayed the migration of salmon in 1985 relative to other years. Predictions regarding catches of small and large salmon for both the island and Labrador in 1986 are provided.

Résumé

Les prises commerciales de petit saumon en 1985 (données préliminaires) ont été supérieures à celles de 1984, mais inférieures aux moyennes de 1974-1984 et de 1980-1984 tant pour l'île de Terre-Neuve que pour le Labrador; les débarquements de gros saumon ont chuté, par rapport aux débarquements de 1984 et aux moyennes établies pour l'île de Terre-Neuve et pour le Labrador. En 1985, les prises sportives de madeleineau ont augmenté pour l'île de Terre-Neuve, comparativement à celles de 1984 et aux deux moyennes, tandis que pour le Labrador, ces prises sont demeurées essentiellement les mêmes qu'en 1984, quoique sous les moyennes. Au Labrador, les prises sportives de gros saumon en 1985 ont été inférieures à celles de 1984 et aux deux moyennes. Dans toutes les passes migratoires, les madeleineaux ont été plus nombreux en 1985 que l'année précédente, le phénomène inverse se produisant dans la plupart des cas pour le gros saumon. Les augmentations globales des prises commerciales et sportives ainsi que des madeleineaux dénombrés dans les passes semblent indiquer que le petit saumon a été plus abondant sur l'île en 1985 que l'année précédente. En revanche, pour ce qui est du gros saumon, les prises commerciales donnent à penser qu'il a été dans l'ensemble moins abondant qu'en 1984, tant sur l'île de Terre-Neuve qu'au Labrador, ce qui dans le cas de l'île est corroboré dans une certaine mesure par le plus petit nombre de gros saumons recensés dans les passes par rapport à 1984. Les effets que les glaces, anormalement abondantes, ont eu sur la température de l'eau semblent avoir modifié la répartition du saumon et retardé sa migration en 1985. Le texte contient des prédictions sur les prises de petit et de gros saumon pour l'île de Terre-Neuve et pour le Labrador en 1986.

Introduction

This paper presents the status of Atlantic salmon stocks in the insular Newfoundland (Fig. 1) and Labrador (Fig. 2) portions of the Newfoundland Region in 1985. Catch and effort statistics for the commercial and recreational fisheries and fishway counts (insular Newfoundland) are examined in relation to historical data and the 1985 Management Plan.

Under the 1984 Management Plan, the start of the Newfoundland and Labrador commercial fishery was delayed until June 5 (compared to May 18 for 1981-83 and May 15 prior to 1981). Statistical Area J_2 was completely closed and a compulsory license buy-back program put into effect. A voluntary buy-back program involving both full-time and part-time fishermen went into effect for the remaining Statistical Areas. These restrictions were implemented as a means of reducing the interception of mainland-origin salmon as well as salmon destined to return to depleted rivers on the southwest coast of Newfoundland. An estimated 25% of the total number of large (multi-sea-winter) salmon taken in the Newfoundland and Labrador commercial fishery are of mainland origin (Pippy 1982). In 1985, the June 5 starting date remained in effect and in addition there was a mandatory buy-back of part-time licenses. The level of licensed effort for the Newfoundland Region for 1983 (prior to the restrictions outlined above), 1984, and 1985 are shown in Table 1. In both 1984 and 1985 it was illegal to retain salmon caught as by-catch.

With respect to the recreational fishery, in 1984 a hook-and-release policy pertaining to large salmon was adopted for insular Newfoundland; large salmon that were caught and released were considered part of the bag limit. Regulations governing grilse remained unchanged. Labrador was exempt from the hook-and-release regulation. In 1985, the hook-and-release regulation was extended to include grilse. Released fish were not considered part of the bag limit. Once the daily bag limit was retained (grilse in insular Newfoundland; grilse and/or large salmon in Labrador), angling ceased for the day. In 1985, the angling season was extended on most rivers by two weeks.

Methods

The 1985 catch and effort data were added to that previously presented by Moores et al. (1978), Moores and Tucker (1979, 1980), Ash and Tucker (1984), Moores and Ash (1984), and Ash and O'Connell (unpublished) for the recreational fishery and to that found in May and Lear (1971), Waldron (1974), Reddin and Waldron (1976), Moores and Dawe (1980), Reddin and Day (1980), Reddin and Short (1981), Short and Reddin (1981a, 1981b), Ash (1984), Moores et al. (1984), and Ash and O'Connell (unpublished) for the commercial fishery. Effort in the commercial fishery was presented as the numbers of gear units (50 fathoms of gill net or salmon trap) licensed to prosecute the fishery. Recreational fishing effort was presented as rod days (defined as any day or part thereof on which an angler fishes) and represents actual effort reported by DFO personnel. It contains an estimation of catch and effort during staff days off.

The calculation of mean weights of small and large salmon in the commercial fishery as well are estimated numbers of fish in each category followed procedures outlined in Ash (1984).

Means and 95% confidence intervals for ratio variables were calculated according to Cochran (1977).

Results

Commercial fishery

Preliminary commercial landings for the entire Newfoundland Region and the insular Newfoundland and Labrador portions of the region separately are summarized by weight in Table 2. The catch of small salmon in 1985 increased over 1984 for both insular Newfoundland (23%) and Labrador (34%). The entire region total catch of small salmon increased by 24.8%. The 1985 catch of small salmon showed a decrease in relation to the 1974-84 mean (15.0, 46.4, and 23.4% for insular Newfoundland, Labrador, and the entire Region respectively) and likewise in relation to the 1980-84 mean (14.3, 53.5, and 25.6% respectively). In contrast to the situation for small salmon, the catch of large salmon in 1985 decreased from 1984 for insular Newfoundland (11.8%) and Labrador (36.3%); the decline for the entire Region was 22.3%. The catch of large salmon in 1985 decreased by 52.7% (insular Newfoundland), 71.8% (Labrador), and 61.8% (whole Region) from the 1974-84 mean; corresponding decreases from the 1980-84 mean were 44.0, 69.9, and 57.1% respectively. Total catch (large and small salmon combined) in 1985 for insular Newfoundland increased by 5.8% over 1984; Labrador and the Newfoundland Region as a whole decreased by 21.0 and 2.8% respectively. Compared to the 1974-84 mean, insular Newfoundland, Labrador, and the entire Region recorded decreases of 36.0, 65.8, and 47.9% respectively; corresponding decreases from the 1980-84 mean were 29.6, 65.4, and 44.6% respectively. Additional catch information, namely catch in terms of number, percent small (by weight and by number), and potential effort is presented in Appendix 1a-c.

On a Statistical Area basis for insular Newfoundland, there was a noticeable change in the distribution of commercial landings in 1985 relative to 1984 and the 1974-84 and 1980-84 means (Table 3 and Appendix 1d-m). Figure 3 shows the percent change in catch of small and large salmon in each Statistical Area compared to 1984 (panel a in each graph), the 1974-84 mean (panel b), and the 1980-84 mean (panel c). By examining Fig. 3 in conjunction with Table 3, it is evident that there was a marked decline in both small (except Area A) and large salmon landings on the northeast coast (Areas A and B) concomitant with a very substantial increase in landings along the south coast (Areas H, I, and J_1), being most pronounced for I and J_1. Statistical Areas C and D showed a fairly substantial increase in catch of small salmon over 1984 and the means. Area E recorded a slight increase over 1984 but fell substantially short of the means. Areas F and G showed declines from 1984 and the two means. Catches of large salmon in Areas C to G ranged from slightly below to marginally better than 1984 but were well below the means. Commercial catches for Sections 51-53 of Labrador are presented in Table 3 and Appendix 1n-p. Catches of small salmon in 1985 increased over 1984 for all

Sections but were below the means (Fig. 4). The catch of large salmon was below 1984 and the means in Sections 51 and 52; in Section 53 there was an increase over 1984, however catch remained below the means.

Recreational fishery

Recreational catch and effort data for 1985 for the whole Newfoundland Region and the insular Newfoundland and Labrador portions of the Region separately are presented in Table 2 and Appendix 2a-c. The catch of grilse in 1985 in insular Newfoundland increased by 6.9% over 1984 and increased by 25.0 and 4.7% over the 1974-84 and 1980-84 means respectively. The 1985 catch of grilse in Labrador was essentially the same as in 1984; this catch was down 25.9% from both means. The number of large salmon landed in Labrador in 1985 showed a substantial decrease from 1984 (40.3%) and the 1974-84 (57.3%) and 1980-84 (51.9%) means. Total recreational catch in 1985 for the entire Newfoundland Region increased by 5.5 and 15.7% over 1984 and the 1974-84 mean respectively; it declined marginally (0.7%) from the 1980-84 mean. Effort in 1985 increased by 3.9, 18.6, and 5.8% over 1984, the 1974-84 mean, and the 1980-84 mean respectively for insular Newfoundland. In Labrador, effort declined by 12.9% from 1984 and 6.9% from the 1974-84 mean while compared to the 1980-84 mean it remained unchanged. For the whole Newfoundland Region, effort increased relative to 1984 (3.1%), the 1974-84 mean (17.6%), and the 1980-84 mean (5.4%). Catch per unit effort (CPUE) in 1985 increased over 1984 for both insular Newfoundland (3.2%) and Labrador (12.3%) for an increase of 3.0% for the whole Region. CPUE showed an increase of 3.2% over the 1974-84 mean for insular Newfoundland but a decline of 24.0% for Labrador. For the Region as a whole, CPUE in 1985 was essentially the same as the 1974-84 mean. Compared to the 1980-84 mean, CPUE in 1985 decreased by 3.0, 27.4, and 5.6% for insular Newfoundland, Labrador, and the Region respectively.

Recreational catch in 1985 is presented for each Statistical Area of insular Newfoundland in Table 3 and Appendix 2d-m. Areas B, C, D, E, F, and J_1 showed an increase over 1984 and the two means (Fig. 3). In Area A, catch increased over 1984 but fell short of the two means. Area H recorded an average year. Decreased catches both in relation to 1984 and the means were noted for Areas G and I. Recreational catches for Statistical Sections 51-53 in Labrador are shown in Table 3 and Appendix 2n-p. The 1985 catch of grilse and large salmon increased substantially over 1984 and the means in Section 51 (Fig. 4). The grilse catch in Section 53 was average while for Section 52 it was similar to 1984 but well below the means. The catch of large salmon in Sections 52 and 53 showed a substantial decline.

Areas G and I showed declines in angling catch. Individual rivers were therefore examined in each of these areas. In Area G, Salmonier River, Big Barachois River, and Branch River all experienced a reduction in catch and catch per unit effort (CPUE) compared to 1984 and the 1974-84 and 1980-84 means (Appendix 3a-c). This observation also applied to Garnish River, Long Harbour River, and Bay du Nord River in Area I (Appendix 3d-f). As for other Statistical Areas, Main River (Sop's Arm) in Area A showed only a marginal improvement over the low catches reported for that river by O'Connell et al. (1985) (Appendix 3g); Charles Brook in Area B showed a drastic decline in catch and CPUE in 1985 (Appendix 3h).

Fishway Counts

The 1985 grilse count increased over 1984 for Indian River, Gander River (Salmon Brook tributary), and the lower and upper Terra Nova River (Table 4). The grilse count for Bishop's Falls and Great Rattling Brook was comparable to 1984 which in turn was the highest year on record. Northeast River, Placentia, was average while Middle Brook recorded a substantial decline. The 1985 count of large salmon decreased from 1984 for all fishways except Indian River and the lower Terra Nova River where slight increases occurred (Table 5).

The count of grilse in 1985 was higher than the 1975-84 and 1980-84 means for all fishways except Middle Brook where the reverse occurred. The count of large salmon in 1985 was lower than the means for Indian River, Bishop's Falls, Great Rattling Brook, Middle Brook, and Northeast River, Placentia; the count for lower Terra Nova River was higher than both means while for upper Terra Nova it was higher than the 1980-84 mean but lower than the 1975-84 mean. It should be cautioned that the means in some instances should be higher because of the inclusion of partial counts.

Predictions for 1986

The linear regression of commercial catch (by weight) of large salmon (year n+1) on small salmon (year n) for the period 1974-85 for insular Newfoundland (Newfoundland Region) was significant (Fig. 5). The linear regression for Labrador (Newfoundland Region) was not significant ($P = 0.13$). The $\log_e$-$\log_e$ regression for Labrador, however, was significant (Fig. 6). The predicted commercial catch (and 95% confidence limits) of large salmon for the insular Newfoundland portion of the Newfoundland Region in 1986 using the linear regression is 337 (236-438) t. This is substantially above 1985 landings but below the 1974-84 and 1980-84 means. The predicted commercial catch of large salmon for the Labrador portion of the Newfoundland Region in 1986 (using the log-transformed regression) is 233 (150-363) t, which is twice that of 1985 but below the 1974-84 and 1980-84 means. It should be cautioned however that Labrador catch statistics in 1985 are incomplete.

Discussion

It is obvious that there was a dramatic change in the distribution of commercial catches in 1985 compared to previous years. In 1985 approximately 47% of the insular Newfoundland (Newfoundland Region) landings occurred in Statistical Areas A, B, and C and 29% in Areas H, I, and J_1. This is in contrast to the catch distribution during the period 1974-84, when 61% of the landings occurred in Areas A, B, and C and 15% in Areas H, I, and J_1. The more southerly distribution of landings is believed to be caused by environmental conditions at sea during the spring of 1985 (Reddin and O'Connell unpubl). It is hypothesized that heavy ice conditions and low water temperatures in May and June along the Newfoundland coast caused a delay in the inshore migration of Atlantic salmon and also forced both northern and southern Canadian stocks farther south. Salmon from stocks with origin along the northeast coast of Newfoundland and Labrador would have been susceptible to fisheries farther south along the east coast of Newfoundland. Southern stocks from the south and

west coasts of Newfoundland and stocks from Gulf of St. Lawrence, probably did not encounter the east coast fisheries to the same extent as in previous years, but were more available to fisheries in Statistical Areas H, I, and J_1. Changes in the distributional pattern of the 4°C surface isotherm in the area of Port Aux Basques to Burgeo (Area J_2) in late May and early June created a very atypical condition where salmon appeared to be concentrated across Statistical Areas H, I, and J_1.

The decrease in licensed (potential) effort in 1985 brought about by the mandatory buy-back of part-time licenses did not result in a significant lowering of total commercial catch. Two important factors to be considered in evaluating this result are: 1) abundance of fish in 1985 relative to 1984 and 2) the proportion of potential effort actually fished in 1985 compared to 1984, both of which might not be mutually exclusive. Considering the relative contribution of the catch of small versus large salmon to the total catch, while the former showed an overall increase, the latter continued to decline rather substantially. There is a suggestion from commercial catches that the overall abundance of large salmon in 1985 was lower than in 1984 for the island and Labrador; the poor representation of this component in the fishway counts in 1985 tends to support this statement for insular Newfoundland. However, the same does not appear to be true for small salmon. Overall concurrent increases in commercial and recreational catches as well as fishway counts suggest that the abundance of small salmon in 1985 was higher than in 1984 for the insular Newfoundland portion of the Newfoundland Region. Further evidence to support this conclusion comes from the fact that recreational catch in 1980 was the highest recorded up to that year; assuming a modal smolt age of 3+ years and using recreational catch as an index of spawning escapement (Chadwick 1982), small salmon resulting from the 1980 spawning escapement would have been recruited to the fishery in 1985. It should be pointed out that recreational catches and fishway counts in 1985 could have been affected by the extended angling season.

Based on the high recreational catch of grilse for insular Newfoundland in 1981 (highest on record, Table 2), the above average counts of grilse at fishways (Table 4), and a modal smolt age of 3+ years, it is expected that the abundance of small salmon in 1986 will be higher than in 1985. Given the substantial increase in the commercial catch of small salmon in Labrador in 1980 and a modal smolt age of 4+ years, it is possible that the abundance of small salmon will increase in 1986.

Problems outlined by O'Connell et al. (1985) in regard to evaluation of the impact of the 1984 Management Plan on a Statistical Area basis apply also to 1985. The situation for 1985 is obviously confounded even further by the prevailing anomalous environmental conditions with attendant effects on salmon distribution and possible altered patterns of exploitation.

Acknowledgment

The authors wish to thank Neila Caines for assistance in data compilation and analysis.

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Table 1. Number of licensed Atlantic salmon fishermen and amount of gear for 1983-85 by Statistical Area for the Newfoundland Region.

Area	1983		1984		1985	
	Fishermen	Gear units	Fishermen	Gear units	Fishermen	Gear units
A	578	2,315	512	1,892	453	1,786
B	1,033	3,729	892	3,124	731	2,850
C	479	1,661	395	1,341	297	1,160
D	383	1,499	317	1,160	270	1,062
E	356	1,402	277	1,012	240	936
F	239	1,089	200	774	187	746
G	68	235	58	201	47	184
H	250	934	201	718	168	662
I	149	570	128	472	119	458
J_1	114	499	85	314	79	310
O	690	2,959	626	2,463	588	2,338
Total Nfld. Region	4,339	16,892	3,691	13,471	3,179	12,492

Table 2. Atlantic salmon commercial catch data and recreational catch and effort data for the whole Newfoundland Region and for the Insular Newfoundland and Labrador portions of the Region, 1974-85. Long-term means are included.

	Commercial catch (tonnes)									Recreational catch (no.) and effort (rod days)														
	Small			Large			Total			Grilse (x 10^2)			Salmon			Total (x 10^2)			Effort (x 10^2)			CPUE		
Year	Ins. Nfld.	Lab.	Nfld. Reg.	Ins. Nfld.	Lab.	Nfld. Reg.	Ins. Nfld.	Lab.	Nfld. Reg.	Ins. Nfld.	Lab.	Nfld. Reg.	Ins. Nfld.	Lab.	Nfld. Reg.	Ins. Nfld.	Lab.	Nfld. Reg.	Ins. Nfld.	Lab.	Nfld. Reg.	Ins. Nfld.	Lab.	Nfld. Reg.
1974	433	94	527	587	524	1111	1019	617	1636	155	18	173	171	512	683	157	23	180	679	28	707	0.23	0.82	0.25
1975	468	176	644	642	429	1071	1108	605	1713	161	29	190	245	173	418	163	31	194	602	20	622	0.27	1.52	0.31
1976	373	137	510	549	523	1072	924	661	1585	164	32	196	320	520	840	167	38	205	649	33	681	0.26	1.15	0.30
1977	353	117	470	653	481	1134	1006	599	1605	214	29	243	1186	693	1879	226	36	262	691	33	724	0.33	1.09	0.36
1978	173	56	229	381	375	756	554	430	984	197	21	218	616	584	1200	203	27	230	636	38	674	0.32	0.70	0.34
1979	336	81	417	196	213	409	529	294	823	179	32	211	379	490	869	182	37	219	502	32	534	0.36	1.16	0.41
1980	498	209	707	539	579	1118	1036	788	1824	234	29	262	720	552	1272	241	34	275	666	25	691	0.36	1.38	0.40
1981	380	224	604	558	538	1096	938	763	1701	304	35	339	552	300	852	310	38	348	779	19	797	0.40	2.06	0.44
1982	363	144	507	271	362	633	630	506	1136	260	28	288	531	541	1072	265	34	299	852	31	883	0.31	1.08	0.34
1983	264	91	355	270	239	509	536	330	866	216	24	240	695	298	993	223	27	250	822	31	853	0.27	0.85	0.29
1984	244	50	294	238	179	417	482	229	711	248	20	268	47	325	372	249	23	272	797	31	829	0.31	0.73	0.33
1985[1]	300	67	367	210	114	324	510	181	691	265	20	285	0	194	194	265	22	287	828	27	855	0.32	0.82	0.34
$\bar{x}$ ± 95% C.L.																								
1974-84	353 ±65	125 ±39	479 ±99	444 ±117	404 ±95	848 ±205	797 ±166	529 ±126	1326 ±283	212 ±32	27 ±4	239 ±33	497 ±212	454 ±105	950 ±282	217 ±32	32 ±4	248 ±33	698 ±71	29 ±4	727 ±71	0.31 ±0.02	1.08 ±0.19	0.34 ±0.03
1980-84	350 ±127	144 ±93	493 ±212	375 ±197	379 ±220	755 ±411	724 ±307	523 ±312	1248 ±616	253 ±41	27 ±7	280 ±47	509 ±337	403 ±163	912 ±420	258 ±41	31 ±8	289 ±46	783 ±88	27 ±7	811 ±92	0.33 ±0.04	1.13 ±0.38	0.36 ±0.05

[1]Preliminary figures.

Table 3. Atlantic salmon commercial catch data and recreational catch and effort data for 1985 by Statistical Area for Insular Newfoundland and by Statistical Section for Labrador, Newfoundland Region. Catches in 1984 and long-term means are included. The 1984 long-term mean is in parentheses.

Statistical Area/ Section	Commercial catch (tonnes)									Recreational catch (no.) and effort (rod days)														
	1985[1]			1984			$\bar{x}$ 1974-84 (1980-84)			1985					1984					$\bar{x}$ 1974-84 (1980-84)				
	Sm.	Lg.	Tot.	Sm.	Lg.	Tot.	Sm.	Lg.	Tot.	Gr.	Lg.	Tot.	Effort	CPUE	Gr.	Lg.	Tot.	Effort	CPUE	Gr.	Lg.	Tot.	Effort	CPUE
Insular Newfoundland																								
A	54	33	87	53	80	133	122 (122)	125 (120)	247 (241)	1310	0	1310	2355	0.56	1059	0	1059	2629	0.40	1597 (1964)	14 (28)	1611 (1992)	3320 (3793)	0.49 (0.53)
B	54	29	83	76	52	128	81 (94)	75 (83)	156 (177)	12190	0	12190	34329	0.36	9900	15	9915	29633	0.33	8634 (10355)	345 (288)	8978 (10643)	26329 (29333)	0.34 (0.36)
C	39	28	67	26	34	60	29 (32)	51 (40)	80 (72)	3484	0	3484	11613	0.30	2703	1	2704	12403	0.22	2547 (2737)	45 (58)	2590 (2794)	8818 (9910)	0.29 (0.28)
D	40	18	58	19	16	35	29 (21)	41 (28)	70 (49)	429	0	429	2256	0.19	312	5	317	3218	0.10	310 (364)	10 (15)	319 (379)	2674 (3229)	0.12 (0.12)
E	8	16	24	7	13	20	16 (12)	38 (29)	54 (41)	112	0	112	1635	0.07	96	4	100	1381	0.07	102 (123)	5 (10)	107 (133)	1562 (1540)	0.07 (0.09)
F	14	17	31	16	16	32	17 (14)	41 (29)	58 (43)	103	0	103	611	0.17	79	0	79	357	0.22	77 (80)	1 (3)	78 (83)	440 (402)	0.18 (0.21)
G	8	2	10	11	2	12	10 (11)	3 (3)	12 (13)	1750	0	1750	9385	0.19	2264	5	2269	8754	0.26	1792 (2127)	26 (44)	1818 (2171)	8249 (8174)	0.22 (0.27)
H	37	11	48	19	8	28	21 (20)	18 (15)	40 (36)	1326	0	1326	6887	0.19	1457	2	1459	6361	0.23	1146 (1339)	21 (29)	1167 (1368)	8358 (8752)	0.14 (0.16)
I	28	22	50	8	7	14	11 (10)	11 (11)	23 (21)	1095	0	1095	3935	0.28	1942	4	1946	4763	0.41	1567 (1957)	12 (18)	1579 (1975)	3845 (5126)	0.41 (0.39)
J_1	18	34	52	9	10	20	17 (14)	41 (18)	58 (32)	3643	0	3643	7377	0.49	3213	2	3215	8199	0.39	2690 (3186)	16 (13)	2706 (3199)	5638 (6985)	0.48 (0.46)
Labrador (Statistical Area 0)																								
51	24	45	69	16	84	100	55 (60)	192 (160)	247 (220)	258	24	282	396	0.71	168	2	170	489	0.35	195 (187)	17 (15)	212 (203)	328 (347)	0.65 (0.58)
52	24	24	48	17	61	78	46 (60)	127 (141)	173 (201)	1109	35	1144	1360	0.84	1099	111	1210	1810	0.67	1884 (1860)	148 (161)	2032 (2021)	1896 (1714)	1.07 (1.18)
53	19	45	64	17	34	51	25 (23)	86 (79)	110 (102)	642	135	777	946	0.82	681	212	893	832	1.07	618 (654)	289 (227)	907 (881)	695 (679)	1.31 (1.30)

[1]Preliminary figures.

Table 4. Counts of grilse from fishways in insular Newfoundland 1955-85; also shown are means ($\bar{x}$), standard deviations (SD), and coefficients of variation (CV).

	Fishways							
	1	2A	2B	3	4	5	6	7
1955							53	
1956					324[a]	558	32	
1957				642	28[a]	141	21	
1958	843			1072	332[a]	677	10	
1959	438	886[a]	-	591	205[a]	394	120	
1960	494	1013	94	291		490	86	
1961	153	839	319	41		318	74	
1962	-	-	1037			496	284	
1963	267	1202	491			551	372	
1964	1199	-	1752			419	246	
1965	394	1228	587			474	334	
1966	292	829[a]	942			368	134	
1967	116	1372	822			613	373	
1968	682	-	1334			715	409	57[a]
1969	222	979	892			658	463	
1970	392	-	1023			754	563	
1971	364	961	902	714		580	316	159
1972	112	794	495[a]	541	838	609	330	236
1973	714	205	-	970	1079[a]	455	340	399[a]
1974	616	2583	-	862	770[a]		161	224
1975	788	9010	6012		1119[a]		782	186[a]
1976	353	4106	3037				346	294
1977	1307	6058	4294				371	
1978	1125	3757	2633	755	1412	810	436	390
1979	2959	6693	3923	404	1283[a]	569	455	454
1980	1760	-	4550	997	1703	842	422	433
1981	2696[a]	9015[a]	4286	2459	2415	1115	619	334[a]
1982	2149	7654[a]	2836	1425	1281	963	625	86[a]
1983	2205[a]	-	3031[a]	978	1195	1210	853	233
1984	1346[a]	17389	6398[a]	1081	1379	1232	911	419
1985	2074	16648	5987	1663	904	1557	960	384
1975-84								
$\bar{x}$	1668.8	7960.2	4100.0	1157.0	1473.4	963.0	582.0	314.3
SD	835.6	4292.1	1302.4	653.1	418.9	241.4	207.7	125.6
CV	50.07	53.92	31.77	56.45	28.43	25.07	35.69	39.96
1980-84								
$\bar{x}$	2031.2	11352.7	4220.2	1388.0	1594.6	1072.4	686.0	301.0
SD	507.2	5271.7	1430.6	625.2	497.3	166.8	197.7	144.3
CV	24.97	46.44	33.90	45.04	31.19	15.55	28.82	47.94

1 Indian Brook
2 Exploits River
  (a) Bishop's Falls
  (b) Gt. Rattling Brook
3 Gander River
4 Middle Brook
5 L. Terra Nova River
6 U. Terra Nova River
7 Northeast River (Placentia)

[a]Partial counts.

Table 5. Counts of large salmon at fishways in insular Newfoundland 1955-85; also shown are means ($\bar{x}$), standard deviations (SD), and coefficients of variation (CV).

	Fishways							
	1	2A	2B	3	4	5	6	7
1955							24	
1956					56[a]	36	44	
1957				323	2[a]	41	1	
1958	80			502	231[a]	195	0	
1959	18	119[a]	-	290	13[a]	67	20	
1960	25	157	9	183		217	0	
1961	1	118	53	15		99	1	
1962	-	-	31			275	4	
1963	22	65	37			320	35	
1964	45	-	116			297	18	
1965	0	203	190			254	51	
1966	3	506[a]	470			220	2	
1967	0	710	382			359	42	
1968	0	-	687			374	28	11[a]
1969	3	498	290			393	136	
1970	0	-	199			470	170	
1971	0	300	261	494		277	121	21
1972	0	113	234[a]	53	10	348	202	34
1973	3	89	-	135	9[a]	299	222	64[a]
1974	8	411	-	8	77[a]		122	9
1975	11	1441	544		9[a]		48	36[a]
1976	3	493	121				37	56
1977	23	584	221				262	
1978	13	302	78	52	16	20	88	32
1979	113	276	119	6	54[a]	170	30	37
1980	25	-	418	15	91	40	15	34
1981	151[a]	1695[a]	514	33	38	90	28	62[a]
1982	67	133[a]	123	18	20	19	8	36[a]
1983	48[a]	-	223[a]	12	75	57	76	22
1984	19[a]	355	111[a]	38	57	107	98	44
1985	27	181	38	26	27	112	60	0
1975-84								
$\bar{x}$	47.3	659.9	247.2	24.9	50.1	71.9	69.0	39.9
SD	49.2	580.8	177.9	16.5	27.6	54.6	74.4	12.4
CV	104.02	88.01	71.97	66.27	55.09	75.94	107.83	31.08
1980-84								
$\bar{x}$	62.0	727.7	277.8	23.2	56.2	62.6	45.0	39.6
SD	53.3	845.1	180.4	11.6	28.3	35.9	39.8	14.8
CV	85.97	116.13	64.94	50.00	50.36	57.35	88.44	37.37

1 Indian Brook
2 Exploits River
  (a) Bishop's Falls
  (b) Gt. Rattling Brook
3 Gander River
4 Middle Brook
5 L. Terra Nova River
6 U. Terra Nova River
7 Northeast River (Placentia)

[a]Partial counts.

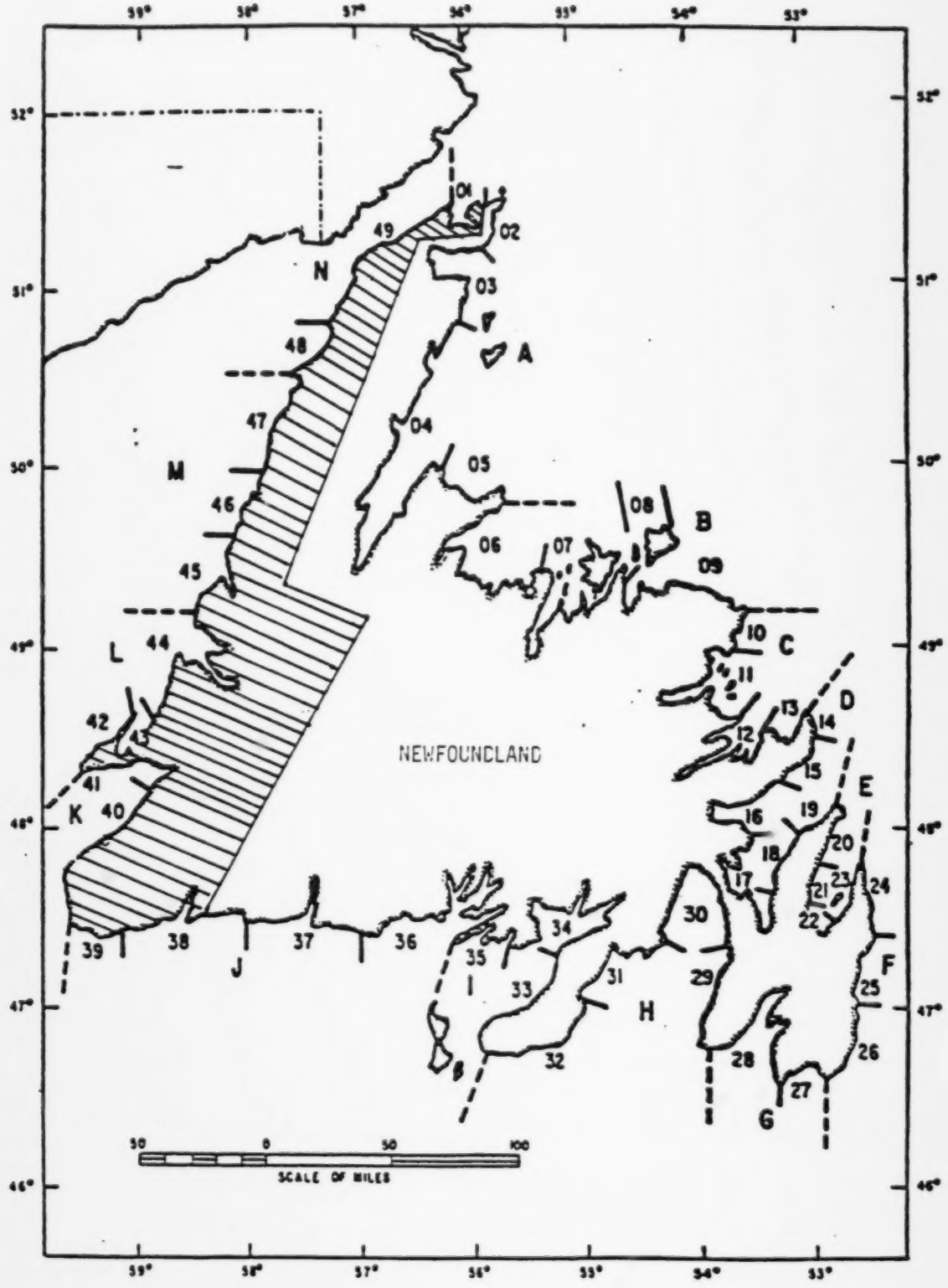

Fig. 1. Boundaries of Statistical Areas (alphabetical) and Statistical Sections (numerical) for insular Newfoundland. Cross-hatched portion denotes area belonging to the Gulf Region.

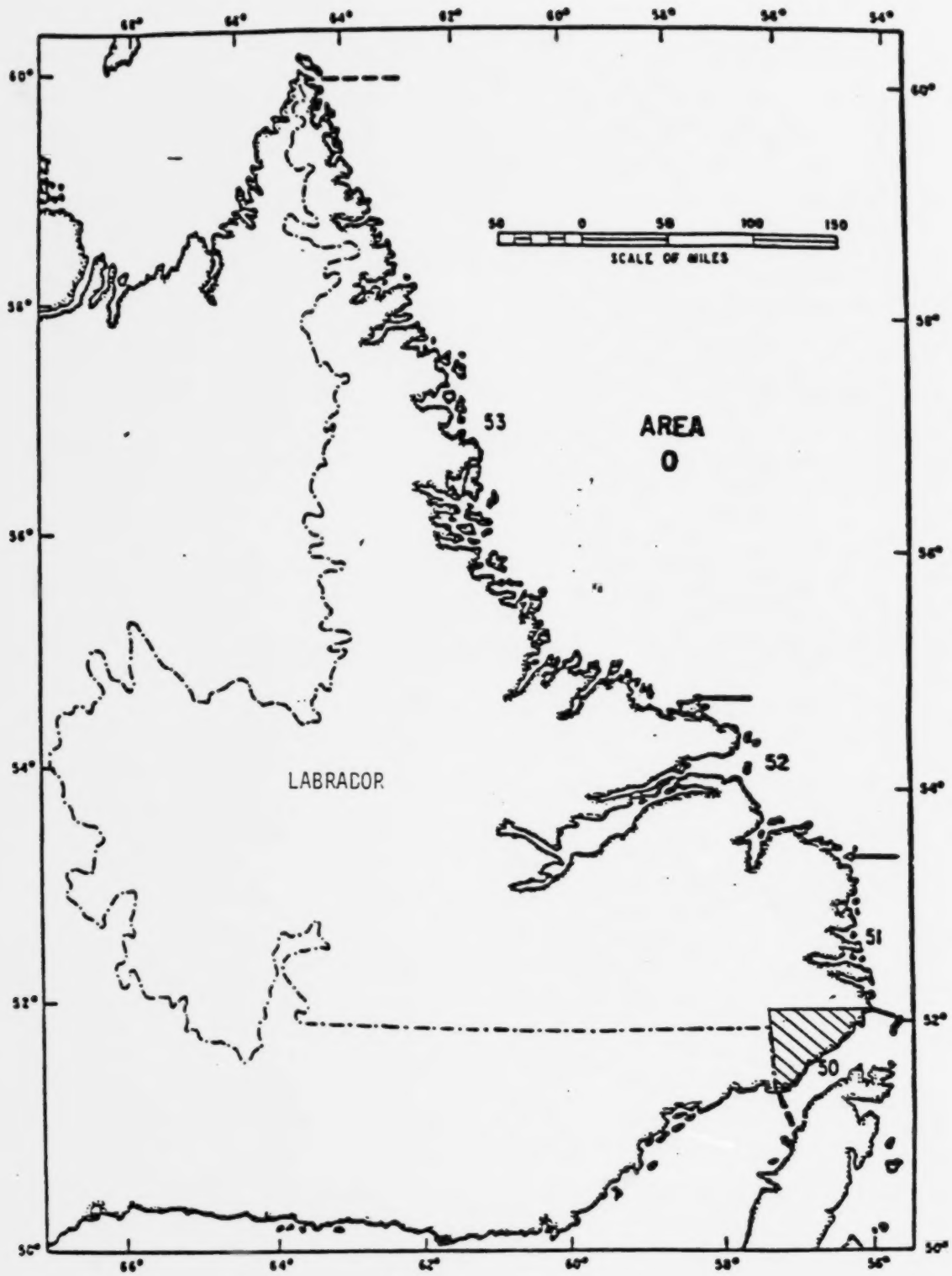

Fig. 2. Boundaries of Statistical Sections for Labrador (Statistical Area 0). Cross-hatched portion denotes area belonging to the Gulf Region.

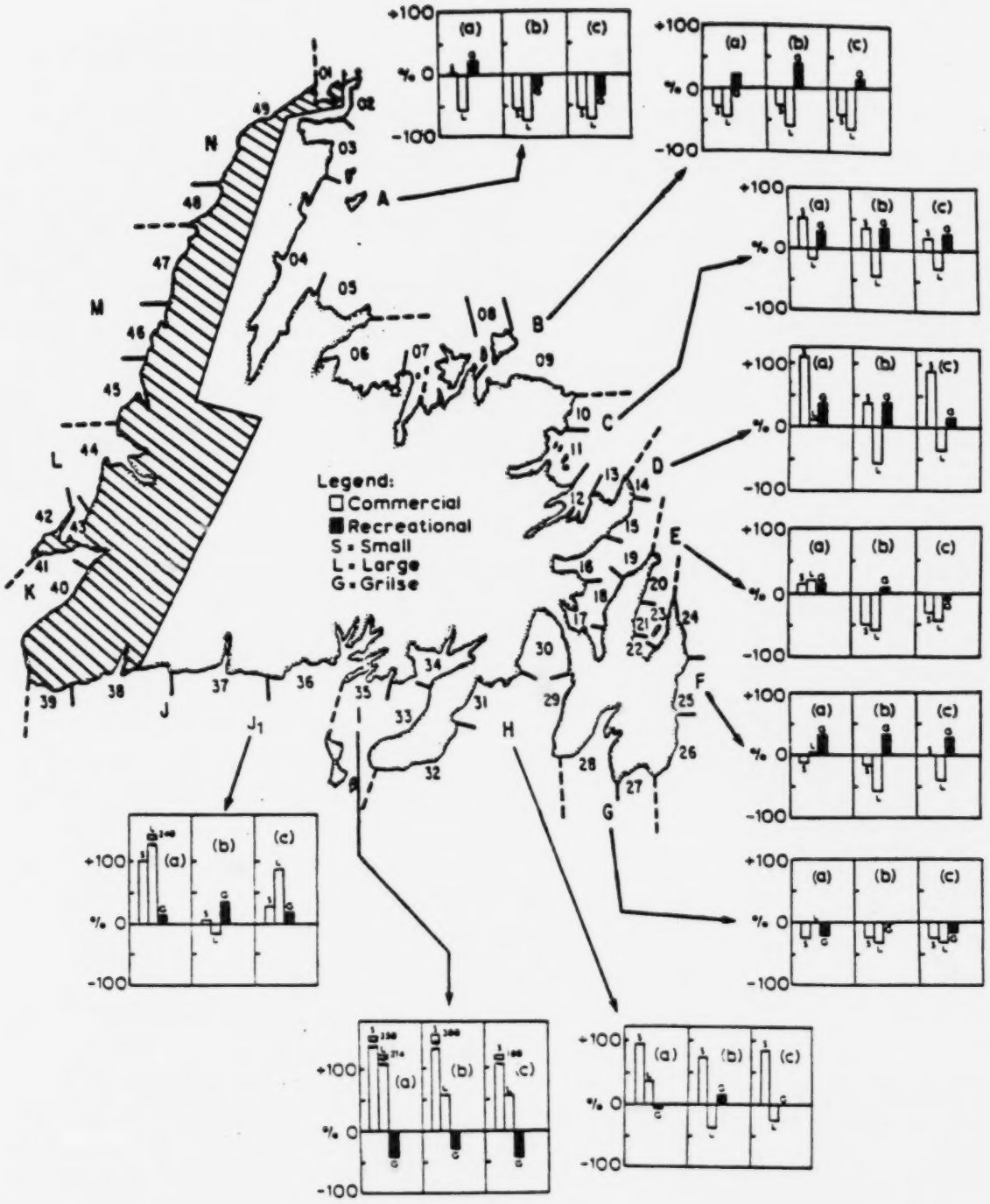

Fig. 3. The 1985 commercial (by weight) and recreational (no.) catches of Atlantic salmon by Statistical Area in insular Newfoundland expressed as percentages in relation to 1984 (panel a of each graph), the 1974-84 mean (panel b), and the 1980-84 mean (panel c). Zero percent denotes 1984 and the two means on each graph.

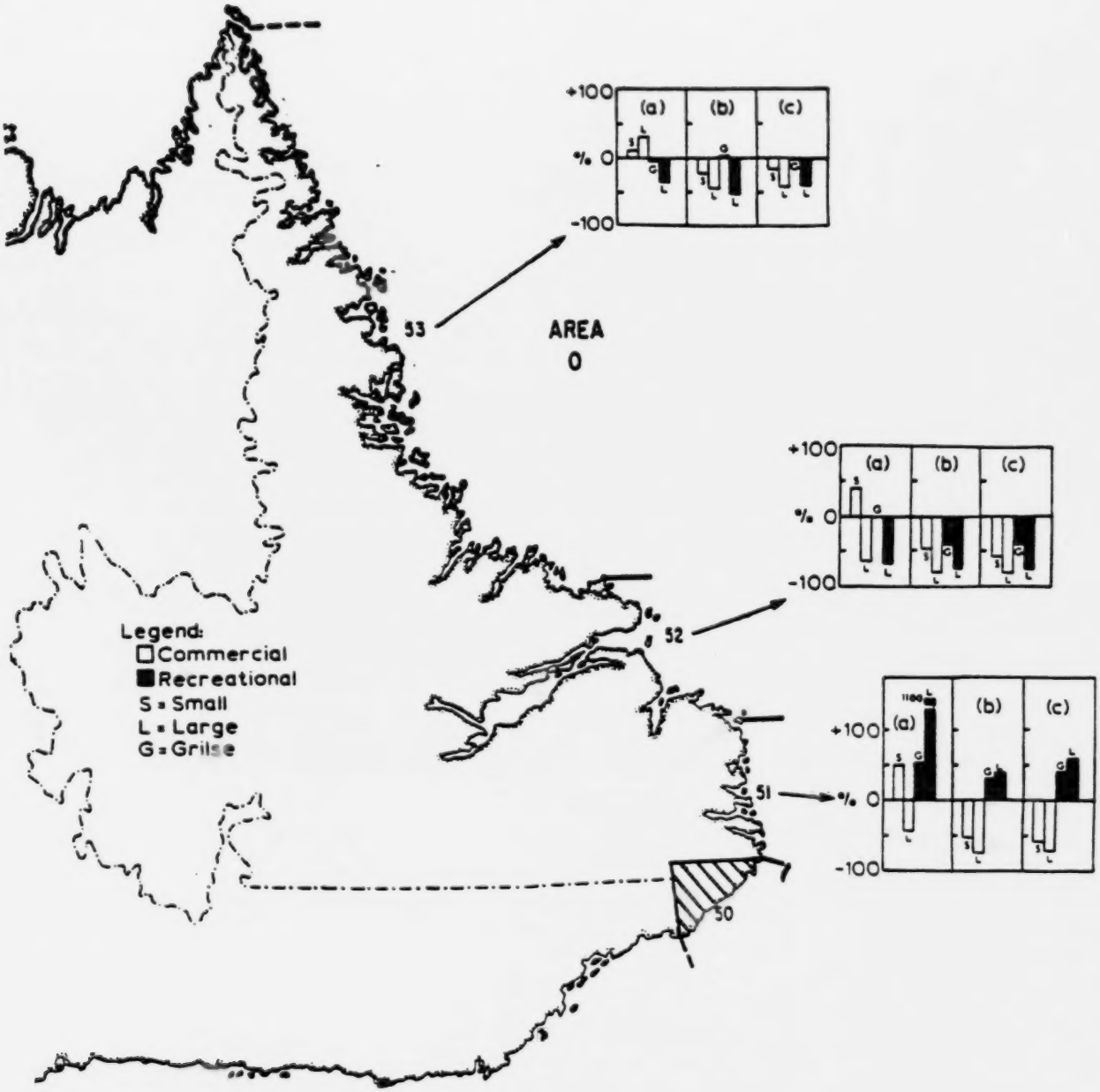

Fig. 4. The 1985 commercial (by weight) and recreational (no.) catches of Atlantic salmon by Statistical Section in Labrador expressed as percentages in relation to 1984 (panel a of each graph), the 1974-84 mean (panel b), and the 1980-84 mean (panel c). Zero percent denotes 1984 and the two means on each graph.

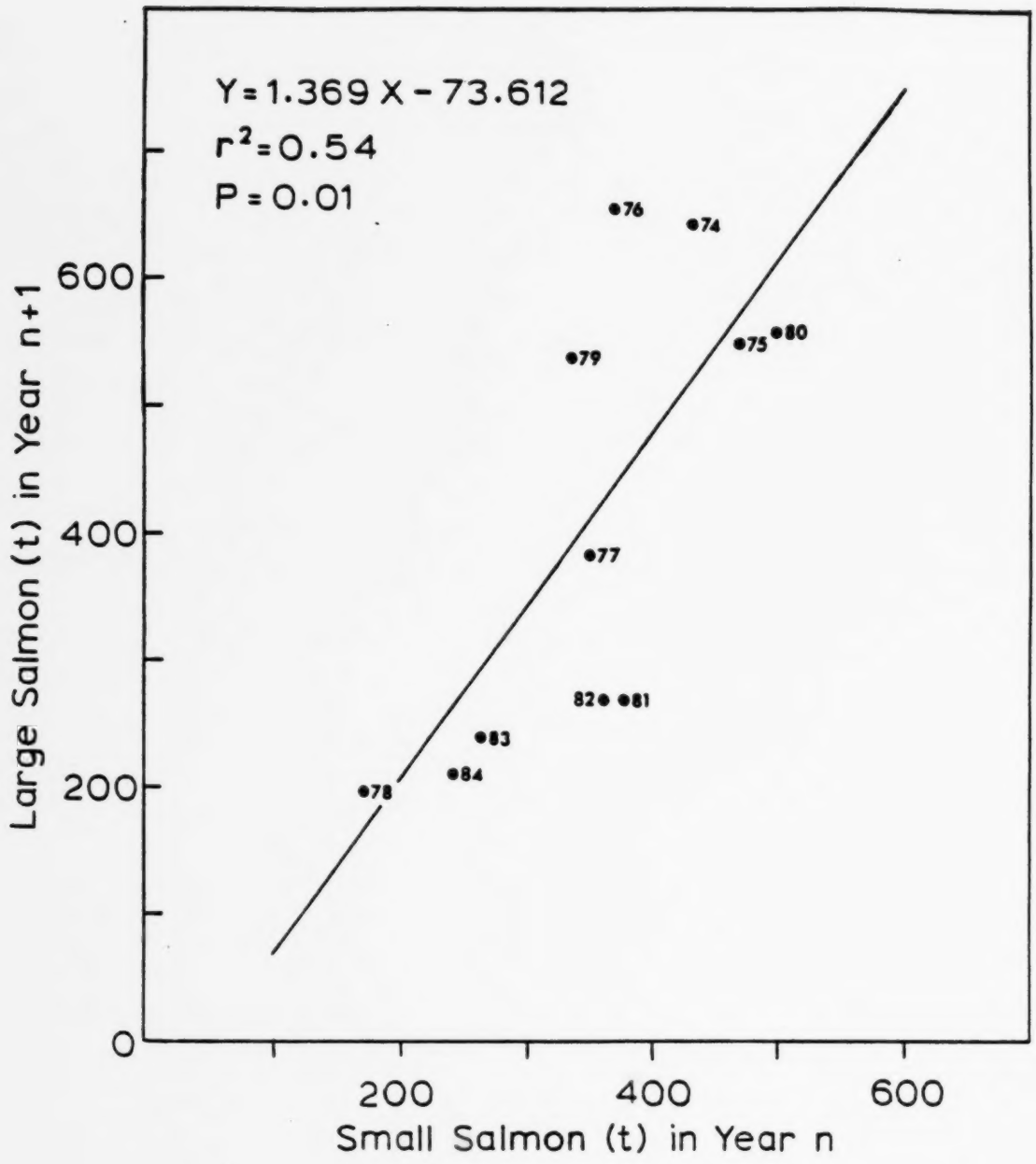

Fig. 5. Linear regression by weight of large salmon caught in year n+1 on small salmon caught in year n for insular Newfoundland (Newfoundland Region).

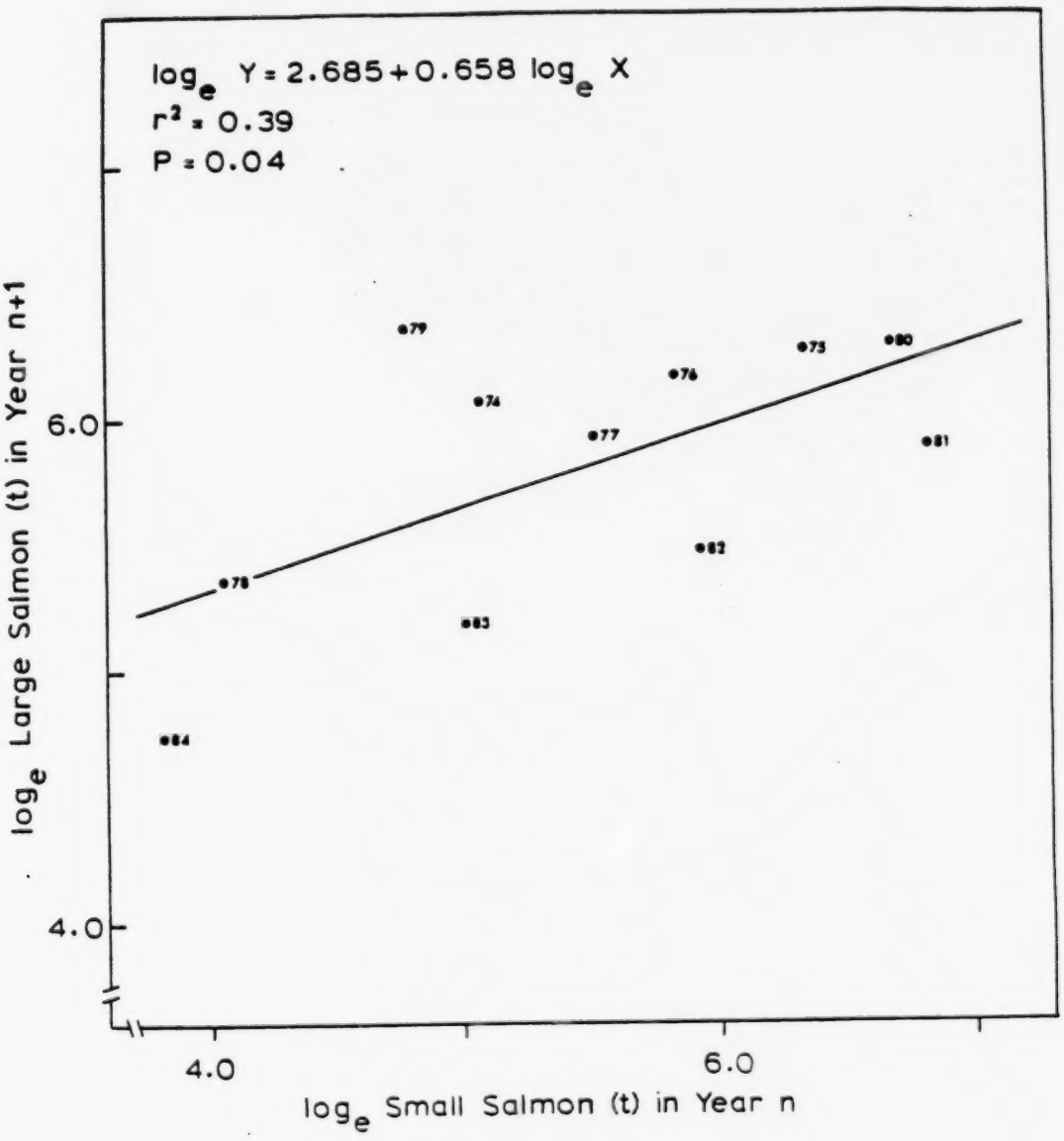

Fig. 6. Log-log regression by weight of large salmon caught in year n+1 on small salmon caught in year n for Labrador (Newfoundland Region).

APPENDIX 1a. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR THE ENTIRE NEWFOUNDLAND REGION, 1974-85. WEIGHT IN METRIC TONNES.

NFLD. & LABRADOR (NFLD REGION)

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	527	278744	1111	230437	1636	509181	32.21	54.74	17287
1975	644	339203	1071	238305	1713	577508	37.59	58.74	21847
1976	510	265272	1072	240707	1585	505979	32.18	52.43	20611
1977	470	238044	1134	237399	1605	475443	29.28	50.07	18902
1978	229	117836	756	160293	984	278129	23.27	42.37	19436
1979	417	207778	409	92004	823	299782	50.67	69.31	19310
1980	707	335392	1118	229763	1824	565155	38.76	59.35	19194
1981	604	309430	1096	221672	1701	531102	35.51	58.26	18346
1982	507	261553	633	139393	1136	400946	44.63	65.23	16265
1983	355	186872	509	113635	866	300507	40.99	62.19	16894
1984	294	154506	417	91560	711	246066	41.35	62.79	13577
1985[1]	367	201591	324	75262	691	276853	53.11	72.82	12512
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	478.55	244966.36	847.82	181378.91	1325.82	426345.27	*16.09	*57.46	18333.55
S.D.:	146.60	72244.25	305.51	62547.49	421.35	124769.18	* 1.82	* 1.90	2254.66
95% LCI:	380.07	196435.04	642.59	139361.55	1042.77	342529.42	*32.53	*53.73	16818.94
95% UCI:	577.02	293497.69	1053.1	223396.26	1608.86	510161.13	*39.66	*61.19	19848.15
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	493.40	249550.60	754.60	159204.60	1247.60	408755.20	*39.55	*61.05	16855.20
S.D.:	171.00	77557.12	330.79	63098.22	495.94	139352.13	* 2.41	* 2.40	2167.31
95% LCI:	281.12	153266.15	343.93	80870.37	631.91	235754.41	*34.83	*56.34	14164.56
95% UCI:	705.68	345835.05	1165.3	237538.83	1863.29	581755.99	*44.27	*65.76	19545.84

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 1b. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR THE INSULAR PORTION OF THE NEWFOUNDLAND REGION, 1974-85. WEIGHT IN METRIC TONNES.

INSULAR NEWFOUNDLAND (NFLD REGION)

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	433	231751	587	123535	1019	355286	42.49	65.23	15099
1975	468	246706	642	138536	1108	385242	42.24	64.04	19127
1976	373	200215	549	124356	924	324571	40.37	61.69	17644
1977	353	179709	653	139083	1006	318792	35.09	56.37	16037
1978	173	88206	381	80535	554	168741	31.23	52.27	16268
1979	336	169258	196	43640	529	212898	63.52	79.50	16087
1980	498	240406	539	113946	1036	354352	48.07	67.84	16218
1981	380	201408	558	116944	938	318352	40.51	63.27	15417
1982	363	189483	271	62116	630	251599	57.62	75.31	13391
1983	264	140723	270	60912	536	201635	49.25	69.79	13935
1984	244	130685	238	53617	482	184302	50.62	70.91	11114
1985[1]	300	165842	210	50035	510	215877	58.82	76.82	10174
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	353.18	183504.55	444.00	96110.91	796.55	279615.45	*44.34	*65.63	15485.18
S.D.:	97.14	49106.80	174.50	36255.51	246.76	77601.39	* 1.77	* 1.53	2139.85
95% LCL:	287.92	150516.20	326.78	71755.65	630.78	227485.38	*40.88	*62.62	14047.70
95% UCL:	418.44	216492.89	561.22	120466.17	962.31	331745.53	*47.80	*68.63	16922.66
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	349.80	180541.00	375.20	81507.00	724.40	262048.00	*48.29	*68.90	14015.00
S.D.:	101.99	45194.86	158.90	31169.24	247.93	73303.34	* 1.90	* 1.60	1976.76
95% LCL:	223.19	124433.16	177.93	42811.48	416.60	171044.47	*44.57	*65.76	11560.92
95% UCL:	476.41	236648.84	572.47	120202.52	1032.20	353051.53	*52.01	*72.03	16469.08

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 1c. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR THE LABRADOR PORTION OF THE NEWFOUNDLAND REGION, 1974-85. WEIGHT IN METRIC TONNES.

LABRADOR (NILD REGION)

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	94	46993	524	106902	617	153895	15.24	30.54	2188
1975	176	92497	429	99769	605	192266	29.09	48.11	2720
1976	137	65057	523	116351	661	181408	20.73	35.86	2967
1977	117	58335	481	98316	599	156651	19.53	37.24	2865
1978	56	29630	375	79758	430	109388	13.02	27.09	3168
1979	81	38520	213	48364	294	86884	27.55	44.33	3223
1980	209	94986	579	115817	788	210803	26.52	45.06	2976
1981	224	108022	538	104728	763	212750	29.36	50.77	2929
1982	144	72070	362	77277	506	149347	28.46	48.26	2874
1983	91	46149	239	52723	330	98872	27.58	46.68	2959
1984	50	23821	179	37943	229	61764	21.83	38.57	2463
1985[1]	67	35749	114	25227	181	60976	37.02	58.63	2338
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	125.36	61461.82	403.82	85268.00	529.27	146729.82	*23.69	*41.89	2848.36
S.D.:	58.71	27911.27	141.64	28074.19	187.84	51363.67	* 1.46	* 1.96	298.94
95% LCL:	85.93	42711.94	308.67	66408.68	403.09	112225.38	*20.83	*38.04	2647.55
95% UCL:	164.80	80211.70	498.97	104127.32	655.46	181234.25	*26.55	*45.73	3049.18
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	143.60	69009.60	379.40	77697.60	523.20	146707.20	*27.45	*47.04	2840.20
S.D.:	74.61	34535.21	176.90	33121.24	250.90	67045.59	*1.52	* 2.16	214.40
95% LCL:	50.97	26135.35	159.79	36578.74	211.72	63472.45	*24.46	*42.80	2574.03
95% UCL:	236.23	111883.85	599.01	118816.46	834.68	229941.95	*30.43	*51.27	3106.37

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1]PRELIMINARY FIGURES.

APPENDIX 1d. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA A, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: A

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	67	33508	84	18563	151	52071	44.37	64.35	2430
1975	121	60303	122	27034	242	87337	50.00	69.05	2818
1976	170	89300	175	40698	345	129998	49.28	68.69	2639
1977	123	61651	242	51394	365	113045	33.70	54.54	2473
1978	51	25731	83	17675	135	43406	37.78	59.28	2516
1979	206	103080	66	15708	272	118788	75.74	86.78	2515
1980	167	80078	166	34853	334	114931	50.00	69.67	2480
1981	175	93998	177	36479	351	130477	49.86	72.04	2411
1982	112	59428	80	17340	191	76768	58.64	77.41	2198
1983	101	55721	95	20757	196	76478	51.53	72.86	2317
1984	53	28189	80	17630	133	45819	39.85	61.52	2002
1985[1]	56	29976	33	7631	87	37607	62.07	79.71	1786
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	122.36	62817.00	124.55	27102.82	246.82	89919.82	*49.58	*69.86	2436.27
S.D.:	52.50	26637.68	56.97	11999.35	91.13	33385.81	* 3.71	* 2.99	215.15
95% LCL:	87.10	44922.68	86.27	19042.05	185.60	67492.32	*42.30	*63.99	2291.74
95% UCL:	157.63	80711.32	162.82	35163.59	308.04	112347.31	*56.85	*75.73	2580.80
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	121.60	63482.80	119.60	25411.80	241.00	88894.60	*50.46	*71.41	2281.60
S.D.:	50.34	25144.17	47.93	9473.60	96.10	33777.67	*1.98	* 1.74	188.76
95% LCL:	59.11	32767.19	60.10	13650.65	121.70	46960.81	*46.58	*68.01	2047.26
95% UCL:	184.09	94698.41	179.10	37172.95	360.30	130828.39	*54.33	*74.82	2515.94

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 1e. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA B, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: B

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	54	26821	52	11456	105	38277	51.43	70.07	3151
1975	142	71225	103	22950	246	94175	57.72	75.63	3962
1976	57	30249	60	14303	117	44552	48.72	67.90	3547
1977	85	44691	96	20371	181	65062	46.96	68.69	3327
1978	36	17821	68	14564	104	32385	34.62	55.03	3371
1979	45	21524	33	7403	78	28927	57.69	74.41	3349
1980	135	64024	110	24029	245	88053	55.10	72.71	3485
1981	87	44106	128	26632	215	70738	40.47	62.35	3390
1982	98	50764	69	16022	166	66786	59.04	76.01	3007
1983	74	37560	56	12789	130	50349	56.92	74.60	3729
1984	76	40292	52	11257	128	51549	59.38	78.16	3120
1985[1]	54	30126	29	6685	83	36811	65.06	81.84	2850
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	80.82	40825.18	75.18	16525.09	155.91	57350.27	*51.84	*71.19	3403.45
S.D.:	34.17	16755.50	29.58	6117.06	58.82	21605.23	* 2.43	* 1.80	275.05
95% LCL:	57.86	29569.38	55.31	12415.85	116.40	42836.59	*47.07	*67.65	3218.69
95% UCL:	103.77	52080.98	95.05	20634.33	195.42	71863.96	*56.61	*74.72	3588.22
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	94.00	47349.20	81.00	18145.80	176.80	65495.00	*53.17	*72.29	3346.20
S.D.:	24.85	10557.71	34.06	6842.68	51.96	15507.35	*3.90	* 2.78	288.94
95% LCL:	63.15	34242.18	40.72	9650.85	112.30	46243.17	*45.53	*66.85	2987.49
95% UCL:	124.85	60456.22	125.28	26640.75	241.30	84746.83	*60.81	*77.74	3704.91

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 11. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA C, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: C

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	31	15344	35	7551	65	22895	47.69	67.02	2014
1975	48	28024	112	24380	160	52404	30.00	53.48	2565
1976	13	6284	44	10811	57	17095	22.81	36.76	2354
1977	38	18031	90	19150	128	37181	29.69	48.50	2163
1978	22	11578	59	12785	81	24363	27.16	47.52	2172
1979	11	5342	18	3849	28	9191	39.29	58.12	2169
1980	40	18246	47	10609	87	28855	45.98	63.23	2320
1981	28	14252	65	14366	93	28618	30.11	49.80	1944
1982	37	18607	23	6089	60	24696	61.67	75.34	1551
1983	27	13723	31	7288	58	21011	46.55	65.31	1661
1984	26	13833	34	8000	60	21833	43.33	63.36	1341
1985[1]	39	20645	28	6694	67	27339	58.21	75.51	1160
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	29.18	14842.18	50.73	11352.55	79.73	26194.73	*36.60	*56.66	2023.09
S.D.:	11.29	6218.61	28.96	6072.18	36.97	11202.19	* 3.26	* 3.01	371.47
95% LCI:	21.60	10664.73	31.28	7273.45	54.90	18669.46	*30.22	*50.76	1773.55
95% UCI:	36.76	19019.64	70.18	15431.64	104.56	33719.99	*42.99	*62.56	2272.63
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	31.60	15732.20	40.00	9270.40	71.60	25002.60	*44.13	*62.92	1763.40
S.D.:	6.41	2470.75	16.43	3294.77	16.95	3673.74	*5.28	* 4.36	379.62
95% LCI:	23.62	12664.85	19.60	5180.05	50.56	20441.79	*33.79	*54.37	1292.12
95% UCI:	39.58	18799.55	60.40	13360.75	92.64	29563.41	*54.48	*71.47	2234.68

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 1g. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA D, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: D

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	74	39102	94	19185	168	58287	44.05	67.09	1589
1975	40	21994	67	14171	106	36165	37.74	60.82	2074
1976	21	10204	33	6648	54	16852	38.89	60.55	2074
1977	34	15236	57	11849	90	27085	37.78	56.25	1876
1978	21	10193	55	10689	76	20882	27.63	48.81	1901
1979	20	9661	9	1757	29	11418	68.97	84.61	1853
1980	29	14568	35	6919	63	21487	46.03	67.80	1834
1981	23	12843	50	10356	73	23199	31.51	55.36	1709
1982	23	12006	20	4278	43	16284	53.49	73.73	1536
1983	11	6452	18	4086	30	10518	36.67	61.15	1499
1984	19	10863	16	3678	35	14541	54.29	74.71	1160
1985[1]	40	23289	18	4286	58	27575	68.97	84.46	1082
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	28.64	14827.45	41.27	8510.55	69.73	23338.00	*41.07	*63.53	1736.82
S.D.:	16.95	8991.62	25.95	5270.09	41.09	13730.02	* 2.47	* 2.40	273.66
95% LCL:	17.25	8787.18	23.84	4970.27	42.12	14114.62	*36.22	*58.83	1552.98
95% UCL:	40.03	20867.73	58.71	12050.82	97.33	32561.38	*45.92	*68.24	1920.65
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	21.00	11342.40	27.80	5863.40	48.80	17205.80	*43.03	*65.92	1547.60
S.D.:	6.63	3059.35	14.50	2817.20	18.47	5170.22	*4.89	* 4.04	255.35
95% LCL:	12.77	7544.32	9.80	2365.95	25.87	10787.15	*33.45	*58.00	1230.60
95% UCL:	29.23	15140.48	45.80	9360.85	71.73	23624.45	*52.61	*73.84	1864.60

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1]PRELIMINARY FIGURES.

APPENDIX 1h. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA E, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: E

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	43	21478	83	17277	126	38755	34.13	55.42	1861
1975	19	9819	56	12153	75	21972	25.33	44.69	2567
1976	15	7983	33	7042	48	15025	31.25	53.13	2276
1977	21	11318	56	11875	78	23193	29.49	48.80	1973
1978	10	4771	40	8572	50	13343	20.00	35.76	2066
1979	5	2347	7	1418	11	3765	45.45	62.34	1971
1980	22	10012	52	10747	74	20759	29.73	48.23	2024
1981	18	9363	55	11168	73	20531	24.66	45.60	1954
1982	6	3091	11	2425	17	5516	35.29	56.04	1548
1983	7	3741	16	3478	23	7219	30.43	51.82	1402
1984	7	4256	13	2890	20	7146	35.00	59.56	1012
1985[1]	8	4595	16	3503	24	8098	33.33	56.74	936
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	15.91	8016.27	38.36	8095.00	54.09	16111.27	*29.41	*49.76	1877.64
S.D.:	11.17	5481.93	24.46	5079.54	35.14	10350.63	* 1.63	* 2.01	424.14
95% LCI:	8.41	4333.69	21.93	4682.73	30.48	9158.06	*26.22	*45.82	1592.71
95% UCI:	23.41	11698.85	54.80	11507.27	77.70	23064.49	*32.60	*53.70	2162.56
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	12.00	6092.60	29.40	6141.60	41.40	12234.20	*28.99	*49.80	1588.00
S.D.:	7.45	3815.49	22.10	4414.61	29.38	7708.52	*1.95	* 2.22	415.94
95% LCI:	2.75	1976.53	1.97	661.01	4.92	2664.34	*25.17	*45.45	1071.63
95% UCI:	21.25	10208.67	56.83	11622.19	77.88	21804.06	*32.80	*54.15	2104.37

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 11. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA F, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: F

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	50	27847	84	18210	134	46057	37.31	60.46	1608
1975	28	14513	83	17669	111	32182	25.23	45.10	1875
1976	17	9128	50	10628	67	19756	25.37	46.20	1823
1977	15	7915	55	11754	70	19669	21.43	40.24	1582
1978	3	1487	28	5901	31	7388	9.68	20.13	1588
1979	5	2719	9	1881	14	4600	35.71	59.11	1617
1980	22	10362	67	13953	89	24315	24.72	42.62	1536
1981	13	6980	38	8644	51	15584	25.49	44.53	1524
1982	9	3457	9	2238	17	5695	52.94	60.70	1395
1983	9	4836	15	3441	24	8277	37.50	58.43	1089
1984	16	8471	16	4063	32	12534	50.00	67.58	774
1985[1]	14	6613	17	4747	31	11360	45.16	58.21	746
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	17.00	8879.55	41.27	8943.82	58.18	17823.36	*29.22	*49.82	1491.91
S.D.:	14.14	7327.86	28.49	5967.58	40.00	12678.99	* 2.82	* 3.59	315.11
95% LCL:	8.18	3956.93	22.16	4934.99	31.31	9306.03	*23.70	*42.79	1280.23
95% UCL:	25.82	13802.16	60.38	12952.64	85.05	26340.69	*34.74	*56.85	1703.59
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	13.80	6813.20	29.00	6467.80	42.60	13281.00	*32.39	*51.30	1263.60
S.D.:	5.45	2762.78	23.93	4837.35	28.88	7249.11	*5.37	* 5.42	327.67
95% LCL:	7.04	3383.11	-0.70	462.40	6.74	4281.48	*21.88	*40.67	856.81
95% UCL:	20.57	10243.09	58.70	12473.20	78.46	22280.52	*42.91	*61.93	1670.39

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 1J. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA G, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: G

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	8	4396	2	420	10	4816	80.00	91.28	407
1975	6	3395	3	628	9	4023	66.67	84.39	432
1976	5	2833	1	310	7	3143	71.43	90.14	347
1977	4	2454	1	266	6	2720	66.67	90.22	292
1978	7	3702	5	1013	11	4715	63.64	78.52	287
1979	21	11445	6	1239	26	12684	80.77	90.23	283
1980	12	6153	3	522	14	6675	85.71	92.18	268
1981	13	7024	4	834	17	7858	76.47	89.39	252
1982	13	6706	2	395	14	7101	92.86	94.44	222
1983	7	3891	2	447	9	4338	77.78	89.70	235
1984	11	5353	2	353	12	5706	91.67	93.81	201
1985[1]	8	4638	2	476	10	5114	80.00	90.69	184
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	9.73	5213.82	2.82	584.27	12.27	5798.09	*79.26	*89.92	293.27
S.D.:	4.92	2579.31	1.60	315.01	5.59	2794.25	* 2.71	* 1.19	73.85
95% LCI:	6.42	3481.11	1.74	372.66	8.52	3921.00	*73.95	*87.60	243.66
95% UCI:	13.03	6946.53	3.89	795.88	16.03	7675.18	*84.57	*92.25	342.89
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	11.20	5825.40	2.60	510.20	13.20	6335.60	*84.85	*91.95	235.60
S.D.:	2.49	1253.44	0.89	191.68	2.95	1360.66	*3.54	* 1.08	25.99
95% LCI:	8.11	4269.29	1.49	272.24	9.54	4646.39	*77.90	*89.84	203.34
95% UCI:	14.29	7381.51	3.71	748.16	16.86	8024.81	*91.79	*94.06	267.86

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 1k. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA H, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: H

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	62	36686	36	7880	99	44566	62.63	82.32	1031
1975	15	9604	16	3304	31	12908	48.39	74.40	1330
1976	19	11266	20	4269	39	15535	48.72	72.52	1207
1977	19	11366	17	3677	36	15043	52.78	75.56	1063
1978	13	7416	22	4782	35	12198	37.14	60.80	1069
1979	5	3129	14	3106	20	6235	25.00	50.18	1051
1980	35	19347	28	5916	63	25263	55.56	76.58	1003
1981	8	4698	11	2226	19	6924	42.11	67.85	979
1982	30	16820	16	3526	46	20346	65.22	82.67	837
1983	10	5084	12	2767	22	7851	45.45	64.76	934
1984	19	10241	8	1837	28	12078	67.86	84.79	718
1985[1]	17	20458	11	2324	48	22782	77.08	89.80	662
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	21.36	12332.45	18.18	3935.45	39.82	16267.91	*53.65	*75.81	1020.18
S.D.:	16.17	9465.87	8.08	1741.32	23.40	10975.35	* 3.41	* 2.54	164.46
95% LCL:	10.50	5973.59	12.75	2765.69	24.10	8895.03	*46.93	*70.82	909.71
95% UCL:	32.23	18691.32	23.61	5105.22	55.54	23640.79	*60.38	*80.79	1130.66
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	20.40	11238.00	15.00	3254.40	35.60	14492.40	*57.30	*77.54	894.20
S.D.:	11.93	6681.17	7.81	1617.26	18.56	8023.23	*3.89	* 2.83	117.19
95% LCL:	5.59	2943.57	5.30	1246.63	12.56	4531.85	*49.68	*71.99	748.72
95% UCL:	35.21	19532.43	24.70	5262.17	58.64	24452.95	*64.93	*83.10	1039.68

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1]PRELIMINARY FIGURES.

APPENDIX II. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA 1, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: 1

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	19	11718	28	5612	47	17330	40.43	67.62	586
1975	15	9008	6	1246	21	10254	71.43	87.85	594
1976	17	10265	16	3575	34	13840	50.00	74.17	577
1977	5	3226	7	1550	13	4776	38.46	67.55	554
1978	7	4210	7	1512	14	5722	50.00	73.58	576
1979	7	4095	5	1029	12	5124	58.33	79.92	588
1980	12	5602	14	2960	26	8562	46.15	65.43	593
1981	7	3820	10	2031	17	5851	41.18	65.29	598
1982	19	10191	17	3868	36	14059	52.78	72.49	472
1983	6	3355	6	1414	13	4769	46.15	70.35	570
1984	8	4125	7	1469	14	5594	57.14	73.74	472
1985[1]	28	15697	22	5260	50	20957	56.00	74.90	458
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	11.09	6328.64	11.18	2387.82	22.45	8716.45	*49.39	*72.61	561.82
S.D.:	5.47	3259.77	7.03	1444.37	11.81	4497.97	* 2.94	* 2.19	46.13
95% LCI:	7.42	4138.83	6.46	1417.54	14.52	5694.87	*43.63	*68.31	530.83
95% UCI:	14.76	8518.44	15.90	3358.10	30.39	11738.04	*55.15	*76.90	592.81
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	10.40	5418.60	10.80	2348.40	21.20	7767.00	*49.06	*69.76	541.00
S.D.:	5.32	2797.18	4.66	1052.43	9.73	3794.81	*2.49	* 1.83	63.87
95% LCI:	3.80	1946.00	5.02	1041.85	9.12	3055.88	*44.17	*66.18	461.71
95% UCI:	17.00	8891.20	16.58	3654.95	33.28	12478.12	*53.94	*73.35	620.29

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1]PRELIMINARY FIGURES.

APPENDIX 1m. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA J1, 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL AREA: J1

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	25	14851	89	17381	114	32232	21.93	46.08	422
1975	34	18821	74	15001	107	33822	31.78	55.65	910
1976	39	22703	117	26072	156	48775	25.00	46.55	800
1977	7	3821	32	7197	39	11018	17.95	34.68	734
1978	3	1297	14	3042	17	4339	17.65	29.89	722
1979	11	5916	29	6250	39	12166	28.21	48.63	691
1980	24	12014	17	3438	41	15452	58.54	77.75	675
1981	8	4364	20	4208	29	8572	27.59	50.91	656
1982	16	8413	24	5935	40	14348	40.00	58.64	625
1983	12	6380	19	4445	31	10825	38.71	58.94	499
1984	9	5062	10	2440	20	7502	45.00	67.48	314
1985[1]	18	9805	34	8429	52	18234	34.62	53.77	310
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	17.09	9422.00	40.45	8673.55	57.55	18095.55	*29.70	*52.07	640.73
S.D.:	11.79	6822.48	35.88	7549.31	46.01	13927.30	* 3.04	* 3.15	170.89
95% LCL:	9.17	4838.88	16.35	3602.17	26.64	8739.64	*23.74	*45.89	525.93
95% UCL:	25.01	14005.12	64.55	13744.92	88.45	27451.45	*35.66	*58.24	755.53
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	13.80	7296.60	18.00	4093.20	32.20	11339.80	*42.86	*63.90	553.80
S.D.:	6.50	3079.02	5.15	1293.40	8.64	3486.18	*5.56	* 5.12	150.59
95% LCL:	5.74	3424.11	11.61	2487.49	21.47	7011.83	*31.96	*53.86	366.85
95% UCL:	21.86	11069.09	24.39	5698.91	42.93	15667.77	*53.75	*73.95	740.75

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 1n. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR SECTION 51 (STATISTICAL AREA O), 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL SECTION: 51

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	63	31505	388	79265	451	110770	13.97	28.44	1499
1975	79	41392	224	52113	303	93505	26.07	44.27	1493
1976	64	30660	232	51639	297	82299	21.55	37.25	1595
1977	47	23365	232	47401	279	70766	16.85	33.02	1344
1978	17	9154	173	36608	189	45762	8.99	20.00	1492
1979	30	14211	62	14039	92	28250	32.61	50.30	1565
1980	85	38568	252	51218	337	89786	25.22	42.96	1501
1981	96	46542	195	38461	292	85003	32.88	54.75	1470
1982	70	34932	171	36696	241	71628	29.05	48.77	1309
1983	34	17199	96	21132	130	38331	26.15	44.87	1307
1984	16	7639	84	17914	100	25553	16.00	29.89	980
1985[1]	24	12617	45	10051	69	22668	34.78	55.66	932
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	54.64	26833.36	191.64	40589.64	246.45	67423.00	*22.17	*39.80	1414.09
S.D.:	27.61	13361.51	92.12	18823.61	110.05	28673.53	* 2.41	* 3.21	173.65
95% LCL:	36.09	17857.54	129.75	27944.55	172.52	48161.06	*17.45	*33.51	1297.44
95% UCL:	73.18	35809.19	253.52	53234.72	320.39	86684.94	*26.88	*46.09	1530.74
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	60.20	28976.00	159.60	33084.20	220.00	62060.20	*27.36	*46.69	1313.40
S.D.:	34.03	16046.88	70.14	13636.16	102.24	28646.49	*2.18	* 3.21	206.72
95% LCL:	17.95	9054.36	72.52	16155.38	93.07	26496.59	*23.09	*40.40	1056.76
95% UCL:	102.45	48897.64	246.68	50013.02	346.93	97623.81	*31.63	*52.98	1570.04

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 1o. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR SECTION 52 (STATISTICAL AREA O), 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL SECTION: 52

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	19	9277	101	20524	119	29801	15.97	31.13	401
1975	55	29000	129	30053	184	59053	29.89	49.11	671
1976	43	20273	152	33830	195	54103	22.05	37.47	823
1977	45	22607	151	30869	197	53476	22.84	42.28	909
1978	11	5946	79	16829	90	22775	12.22	26.11	675
1979	35	16890	79	17881	114	34771	30.70	48.57	679
1980	83	37831	215	42262	298	80093	27.85	47.23	457
1981	108	51864	220	41414	328	93278	32.93	55.60	478
1982	56	27964	125	26575	181	54539	30.94	51.27	519
1983	37	19043	82	18352	119	37395	31.09	50.92	572
1984	17	8139	61	12880	78	21019	21.79	38.72	491
1985[1]	24	12898	24	5189	48	18087	50.00	71.31	486
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	46.27	22621.27	126.73	26497.18	173.00	49118.45	*26.75	*46.05	606.82
S.D.:	28.98	13684.82	54.10	10058.51	81.32	22981.32	* 1.79	* 2.49	159.93
95% LCL:	26.80	13428.26	90.39	19740.20	118.37	33680.36	*23.24	*41.18	499.38
95% UCL:	65.74	31814.29	163.07	33254.16	227.63	64556.55	*30.25	*50.93	714.25
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	60.20	28968.20	140.60	28296.60	200.80	57264.80	*29.98	*50.59	503.40
S.D.:	36.15	16853.34	73.91	13291.25	109.31	29724.04	*1.49	* 2.33	44.44
95% LCL:	15.32	8095.37	48.84	11795.98	65.10	20363.45	*27.06	*46.03	448.22
95% UCL:	105.08	49891.03	232.36	44797.22	336.50	94166.15	*32.90	*55.14	558.58

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1] PRELIMINARY FIGURES.

APPENDIX 1p. SUMMARY OF COMMERCIAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR SECTION 53 (STATISTICAL AREA 0), 1974-85. WEIGHT IN METRIC TONNES.

STATISTICAL SECTION: 53

YEAR	SMALL WEIGHT	SMALL NUMBER	LARGE WEIGHT	LARGE NUMBER	TOTAL WEIGHT	TOTAL NUMBER	PERCENT SMALL(W)	PERCENT SMALL(N)	POTENTIAL EFFORT
1974	12	6211	35	7113	47	13324	25.53	46.62	288
1975	42	22105	76	17603	118	39708	35.59	55.67	556
1976	30	14124	139	30882	169	45006	17.75	31.38	549
1977	25	12363	98	20046	123	32409	20.33	38.15	612
1978	28	14530	124	26321	151	40851	18.54	35.57	1001
1979	16	7419	72	16444	88	23863	18.18	31.09	979
1980	41	18587	112	22337	153	40924	26.80	45.42	1018
1981	20	9616	123	24853	143	34469	13.99	27.90	981
1982	18	9174	66	14006	84	23180	21.43	39.58	1046
1983	20	9907	61	13239	81	23146	24.69	42.80	1080
1984	17	8043	34	7149	51	15192	33.33	52.94	992
1985[1]	19	10234	45	9987	64	20221	29.69	50.61	920
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1974-1984):									
MEAN:	24.45	12007.18	85.45	18181.18	109.82	30188.36	*22.27	*39.77	827.45
S.D.:	9.94	4947.22	36.15	7630.54	42.17	11001.85	* 2.10	* 2.98	272.07
95% LCL:	17.77	8683.80	61.17	13055.23	81.49	22797.68	*18.16	*33.93	644.68
95% UCL:	31.13	15330.56	109.74	23307.13	138.15	37579.04	*26.38	*45.62	1010.22
MEANS, STANDARD DEVIATIONS AND CONFIDENCE INTERVALS (1980-1984):									
MEAN:	23.20	11065.40	79.20	16316.80	102.40	27382.20	*22.66	*40.41	1023.40
S.D.:	10.03	4264.08	37.22	7210.60	43.72	10220.18	*3.29	* 4.23	40.40
95% LCL:	10.74	5771.70	32.99	7365.10	48.12	14694.21	*16.20	*32.13	973.25
95% UCL:	35.66	16359.10	125.41	25268.50	156.68	40070.19	*29.11	*48.69	1073.55

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

[1]PRELIMINARY FIGURES.

APPENDIX 2a. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR NEWFOUNDLAND REGION (TOTAL), 1953-85.

NEWFOUNDLAND REGION (TOTAL)

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	27955	7519	707	8226	0.29	.
1954	17074	3421	709	4130	0.24	91
1955	11381	4829	402	5231	0.46	89
1956	33633	7680	609	8289	0.25	89
1957	17856	8949	739	9688	0.54	91
1958	16959	10027	896	10923	0.64	91
1959	18070	8795	750	9545	0.53	93
1960	17929	7290	673	7963	0.44	93
1961	14364	5189	428	5617	0.39	94
1962	22252	9965	769	10734	0.48	87
1963	27518	11494	609	12103	0.44	94
1964	36469	17351	967	18318	0.50	92
1965	35909	13439	784	14223	0.40	96
1966	36353	15339	746	16085	0.44	95
1967	39503	10476	373	10849	0.27	98
1968	41825	18375	681	19056	0.46	94
1969	41966	17793	409	18202	0.43	98
1970	41683	17932	421	18353	0.44	98
1971	41056	15940	457	16397	0.40	98
1972	36295	15180	486	15666	0.43	97
1973	51408	25347	741	26088	0.51	95
1974	70673	17279	683	17962	0.25	97
1975	62220	18962	418	19380	0.31	98
1976	68112	19630	840	20470	0.30	96
1977	72373	24307	1879	26186	0.36	91
1978	67434	21841	1200	23041	0.34	95
1979	53383	21066	869	21935	0.41	96
1980	69097	26235	1272	27507	0.40	94
1981	79729	33921	852	34773	0.44	97
1982	88321	28820	1072	29892	0.34	97
1983	85295	23988	993	24981	0.29	97
1984	82871	26779	372	27151	0.33	98
1985	85485	28536	194	28730	0.34	99
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	81062.6	27948.6	912.2	28860.8	0.36	97
$\bar{x}$±95%cl	±9183.7	±4663.2	±419.6	±4638.6	±0.05	±1.09
N	5	5	5	5	5	5
75-84	72883.5	24554.9	976.7	25531.6	0.35	96
$\bar{x}$±95%cl	±7908.6	±3279.3	±309.4	±3323.5	±0.03	±1.14
N	10	10	10	10	10	10
74-84	72682.5	23893.5	950.0	24843.5	0.34	96
$\bar{x}$±95%cl	±7060.2	±3272.3	±282.0	±3334.5	±0.03	±1.05
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2b. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR NEWFOUNDLAND REGION (INSULAR), 1953-85.

NEWFOUNDLAND REGION (INSULAR)

YEAR	EFFORT ROD DAYS.	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	27955	7519	707	8226	0.29	.
1954	16974	3071	559	3630	0.21	93
1955	11183	4704	394	5098	0.46	89
1956	33532	7660	609	8269	0.25	89
1957	17514	7927	690	8617	0.49	92
1958	16593	9178	876	10054	0.61	90
1959	17570	7972	713	8685	0.49	93
1960	17530	6732	634	7366	0.42	93
1961	13730	4476	302	4778	0.35	96
1962	21641	9201	711	9912	0.46	86
1963	26824	10122	551	10673	0.40	94
1964	34886	15435	846	16281	0.47	92
1965	34083	11895	548	12443	0.37	97
1966	34073	13361	384	13745	0.40	97
1967	38067	9391	178	9569	0.25	99
1968	40004	16244	372	16616	0.42	96
1969	40347	16181	289	16470	0.41	98
1970	38933	15485	180	15665	0.40	99
1971	38417	12933	218	13151	0.34	99
1972	33487	12656	142	12798	0.38	99
1973	46180	19286	164	19450	0.42	99
1974	67894	15518	171	15689	0.23	99
1975	60191	16059	245	16304	0.27	98
1976	64853	16402	320	16722	0.26	98
1977	69057	21375	1186	22561	0.33	93
1978	63599	19723	616	20339	0.32	97
1979	50199	17849	379	18228	0.36	98
1980	66625	23373	720	24093	0.36	96
1981	77884	30428	552	30980	0.40	98
1982	85200	25987	531	26518	0.31	98
1983	82167	21616	695	22311	0.27	97
1984	79740	24831	47	24878	0.31	100
1985	82783	26527	0	26527	0.32	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	78323.2	25247.0	509.0	25756.0	0.33	98
$\bar{x}\pm$95%cl	±8804.2	±4130.2	±337.1	±4084.0	±0.04	±1.00
N	5	5	5	5	5	5
75-84	69951.5	21764.3	529.1	22293.4	0.32	98
$\bar{x}\pm$95%cl	±7923.3	±3250.8	±224.0	±3291.6	±0.02	±0.95
N	10	10	10	10	10	10
74-84	69764.5	21196.5	496.5	21693.0	0.31	98
$\bar{x}\pm$95%cl	±7071.4	±3160.5	±212.3	±3223.3	±0.02	±0.90
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2c. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR NEWFOUNDLAND REGION (LABRADOR), 1953-85.

NEWFOUNDLAND REGION (LABRADOR)

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	.	.	.	.	.	.
1954	100	350	150	500	5.00	.
1955	198	125	8	133	0.67	98
1956	101	20	0	20	0.20	100
1957	342	1022	49	1071	3.13	29
1958	366	849	20	869	2.37	98
1959	500	823	37	860	1.72	96
1960	399	558	39	597	1.50	95
1961	634	713	126	839	1.32	82
1962	611	764	58	822	1.35	92
1963	694	1372	58	1430	2.06	93
1964	1583	1916	121	2037	1.29	92
1965	1826	1544	236	1780	0.97	89
1966	2280	1978	362	2340	1.03	81
1967	1436	1085	195	1280	0.89	91
1968	1821	2131	309	2440	1.34	78
1969	1619	1612	120	1732	1.07	95
1970	2750	2447	241	2688	0.98	87
1971	2639	3007	239	3246	1.23	91
1972	2808	2524	344	2868	1.02	90
1973	5228	6061	577	6638	1.27	81
1974	2779	1761	512	2273	0.82	92
1975	2029	2903	173	3076	1.52	91
1976	3259	3228	520	3748	1.15	85
1977	3316	2932	693	3625	1.09	82
1978	3835	2118	584	2702	0.70	83
1979	3184	3217	490	3707	1.16	81
1980	2472	2862	552	3414	1.38	85
1981	1845	3493	300	3793	2.06	91
1982	3121	2833	541	3374	1.08	87
1983	3128	2372	298	2670	0.85	90
1984	3131	1948	325	2273	0.73	88
1985	2702	2009	194	2203	0.82	91
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	2739.4	2701.6	403.2	3104.8	1.13	88
$\bar{x}$ ±95%cl	±713.6	±720.2	±163.0	±766.0	±0.38	±2.08
N	5	5	5	5	5	5
75-84	2932.0	2790.6	447.6	3238.2	1.10	86
$\bar{x}$ ±95%cl	±443.2	±357.1	±116.8	±381.1	±0.20	±2.03
N	10	10	10	10	10	10
74-84	2918.1	2697.0	453.5	3150.5	1.08	87
$\bar{x}$ ±95%cl	±396.1	±380.4	±104.9	±391.8	±0.19	±2.53
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2d. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA A, 1953-85.

STATISTICAL AREA: A

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	77	58	8	66	0.86	.
1954	134	33	0	33	0.25	100
1955	36	11	0	11	0.31	100
1956	164	70	0	70	0.43	100
1957	68	47	0	47	0.69	100
1958	236	35	0	35	0.15	100
1959	215	45	0	45	0.21	100
1960	183	48	1	49	0.27	98
1961	179	62	3	65	0.36	94
1962	368	95	0	95	0.26	100
1963	1332	216	0	216	0.16	100
1964	1406	440	0	440	0.31	100
1965	1710	735	4	739	0.43	99
1966	3074	1284	28	1312	0.43	96
1967	3412	497	2	499	0.15	100
1968	3778	1300	27	1327	0.35	95
1969	4310	966	45	1011	0.23	97
1970	2312	825	1	826	0.36	100
1971	1745	765	11	776	0.44	99
1972	1360	520	0	520	0.38	100
1973	2379	1218	2	1220	0.51	100
1974	2577	870	4	874	0.34	100
1975	2405	1153	0	1153	0.48	100
1976	3116	1039	1	1040	0.33	100
1977	3590	1673	4	1677	0.47	100
1978	2694	849	1	850	0.32	100
1979	3176	2166	0	2166	0.68	100
1980	3222	1819	37	1856	0.58	98
1981	3740	2505	11	2516	0.67	99
1982	4429	2687	88	2775	0.63	97
1983	4943	1749	4	1753	0.35	100
1984	2629	1059	0	1059	0.40	100
1985	2355	1310	0	1310	0.56	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	3792.6	1963.8	28.0	1991.8	0.53	98.73
x̄±95%cl	±1146.5	±809.8	±45.3	±840.7	±0.13	±1.35
n	5	5	5	5	5	5
75-84	3394.4	1669.9	14.6	1684.5	0.50	99.12
x̄±95%cl	±576.0	±459.8	±20.1	±472.8	±0.09	±0.93
n	10	10	10	10	10	10
74-84	3320.1	1597.2	13.6	1610.8	0.49	99.16
x̄±95%cl	±539.2	±440.5	±18.0	±452.1	±0.08	±0.86
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2e. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA B, 1953-85.

STATISTICAL AREA: B

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	8630	2984	501	3485	0.40	.
1954	7344	1172	428	1600	0.22	87
1955	5125	2367	249	2616	0.51	82
1956	10672	3892	458	4350	0.41	84
1957	8789	4423	527	4950	0.56	88
1958	5888	4364	637	5001	0.85	87
1959	6321	3700	520	4220	0.67	89
1960	7051	3441	509	3950	0.56	88
1961	5277	2118	162	2280	0.43	96
1962	8842	4397	482	4879	0.55	81
1963	10910	3710	332	4042	0.37	93
1964	15608	7237	680	7917	0.51	85
1965	13749	4233	318	4551	0.33	96
1966	15249	6433	194	6627	0.43	96
1967	13915	4163	63	4226	0.30	99
1968	15318	5938	201	6139	0.40	95
1969	13807	4024	114	4138	0.30	98
1970	15759	4849	47	4896	0.31	99
1971	11379	3783	58	3841	0.34	99
1972	10778	3444	24	3468	0.32	99
1973	14544	6710	49	6759	0.46	99
1974	22038	5373	82	5455	0.25	99
1975	22384	5943	166	6109	0.27	97
1976	24787	6683	188	6871	0.28	97
1977	28117	8396	1086	9482	0.34	86
1978	24131	8774	502	9276	0.38	94
1979	21496	8026	327	8353	0.39	96
1980	25172	9414	507	9921	0.39	94
1981	32282	13536	361	13897	0.43	96
1982	32929	9973	258	10231	0.31	98
1983	26649	8954	297	9251	0.35	97
1984	29633	9900	15	9915	0.33	100
1985	34329	12190	0	12190	0.36	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	29333.0	10355.4	287.6	10643.0	0.36	97.20
$\bar{x}$±95%cl	±4221.4	±2265.8	±222.8	±2301.8	±0.04	±1.66
n	5	5	5	5	5	5
75-84	26758.0	8959.9	370.7	9330.6	0.35	95.82
$\bar{x}$±95%cl	±2809.7	±1480.8	±209.1	±1503.7	±0.03	±2.18
n	10	10	10	10	10	10
74-84	26328.9	8633.8	344.5	8978.3	0.34	96.04
$\bar{x}$±95%cl	±2679.6	±1506.1	±195.3	±1552.7	±0.03	±2.05
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2f. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA C, 1953-85.

STATISTICAL AREA: C

YEAR	EFFORT ROD DAYS.	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	6209	1099	37	1136	0.18	.
1954	3302	499	29	528	0.16	97
1955	1764	815	35	850	0.48	93
1956	12072	1077	62	1139	0.09	93
1957	2326	822	44	866	0.37	96
1958	2719	1384	40	1424	0.52	95
1959	3063	1125	43	1168	0.38	97
1960	2580	767	14	781	0.30	99
1961	2185	409	36	445	0.20	96
1962	2639	973	62	1035	0.39	87
1963	4519	1546	61	1607	0.36	94
1964	4877	2376	63	2439	0.50	96
1965	5231	1803	33	1836	0.35	99
1966	4281	1431	35	1466	0.34	98
1967	3754	1569	25	1594	0.42	98
1968	3732	2226	44	2270	0.61	97
1969	5769	2605	27	2632	0.46	99
1970	3189	2226	35	2261	0.71	99
1971	5963	1680	38	1718	0.29	98
1972	2015	1895	20	1915	0.95	99
1973	3894	2112	12	2124	0.55	99
1974	9335	1637	21	1658	0.18	99
1975	7527	1988	23	2011	0.27	99
1976	6975	1898	65	1963	0.28	97
1977	10572	4616	44	4660	0.44	98
1978	9108	2858	28	2886	0.32	99
1979	3926	1331	20	1351	0.34	99
1980	8155	2702	29	2731	0.33	98
1981	8863	3488	35	3523	0.40	99
1982	9935	2433	53	2486	0.25	99
1983	10195	2357	170	2527	0.25	93
1984	12403	2703	1	2704	0.22	100
1985	11613	3484	0	3484	0.30	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	9910.2	2736.6	57.6	2794.2	0.28	97.71
$\bar{x}\pm$95%cl	$\pm$2009.1	$\pm$556.3	$\pm$81.3	$\pm$522.9	$\pm$0.06	$\pm$2.23
n	5	5	5	5	5	5
75-84	8765.9	2637.4	46.8	2684.2	0.31	98.18
$\bar{x}\pm$95%cl	$\pm$1661.7	$\pm$652.6	$\pm$33.5	$\pm$651.5	$\pm$0.05	$\pm$1.19
n	10	10	10	10	10	10
74-84	8817.6	2546.5	44.5	2590.9	0.29	98.25
$\bar{x}\pm$95%cl	$\pm$1484.9	$\pm$615.7	$\pm$30.3	$\pm$616.5	$\pm$0.05	$\pm$1.10
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2g. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA D, 1953-85.

STATISTICAL AREA: D

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	6513	118	0	118	0.02	.
1954	2515	44	0	44	0.02	100
1955	628	92	0	92	0.15	100
1956	4402	92	2	94	0.02	98
1957	805	87	0	87	0.11	100
1958	592	115	0	115	0.19	100
1959	535	55	0	55	0.10	100
1960	547	54	0	54	0.10	100
1961	512	19	0	19	0.04	100
1962	575	53	0	53	0.09	100
1963	837	93	1	94	0.11	98
1964	978	92	0	92	0.09	100
1965	871	85	3	88	0.10	97
1966	935	90	0	90	0.10	100
1967	1480	89	0	89	0.06	100
1968	1126	120	0	120	0.11	100
1969	917	106	0	106	0.12	100
1970	650	84	3	87	0.13	97
1971	710	55	1	56	0.08	99
1972	1345	119	0	119	0.09	100
1973	1683	250	0	250	0.15	100
1974	2685	303	1	304	0.11	100
1975	1851	94	1	95	0.05	100
1976	2864	247	2	249	0.09	98
1977	1869	401	19	420	0.22	93
1978	2237	296	7	303	0.14	98
1979	1766	244	2	246	0.14	99
1980	2807	320	14	334	0.12	95
1981	3406	605	29	634	0.19	92
1982	3031	288	17	305	0.10	97
1983	3684	296	10	306	0.08	97
1984	3218	312	5	317	0.10	98
1985	2256	429	0	429	0.19	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	3229.2	364.2	15.0	379.2	0.12	95.90
$\bar{x}$±95%cl	±419.1	±167.8	±11.2	±177.4	±0.03	±2.27
n	5	5	5	5	5	5
75-84	2673.3	310.3	10.6	320.9	0.12	96.69
$\bar{x}$±95%cl	±498.6	±92.7	±6.5	±98.5	±0.02	±1.66
n	10	10	10	10	10	10
74-84	2674.4	309.6	9.7	319.4	0.12	96.90
$\bar{x}$±95%cl	±444.3	±82.6	±6.1	±87.8	±0.02	±1.58
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2h. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA E, 1953-85.

STATISTICAL AREA: E

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	244	43	0	43	0.18	.
1954	41	5	0	5	0.12	100
1955	7	0	0	0	0.00	100
1956	307	27	1	28	0.09	0
1957	59	24	1	25	0.42	96
1958	72	19	0	19	0.26	100
1959	134	13	0	13	0.10	100
1960	128	25	1	26	0.20	93
1961	54	7	2	9	0.17	93
1962	.	.	.	.	.	.
1963	275	36	0	36	0.13	.
1964	660	59	0	59	0.09	100
1965	762	165	1	166	0.22	98
1966	647	97	0	97	0.15	100
1967	997	78	0	78	0.08	100
1968	829	31	1	32	0.04	99
1969	1216	33	0	33	0.03	100
1970	1103	20	1	21	0.02	97
1971	1295	40	0	40	0.03	100
1972	875	61	0	61	0.07	100
1973	1167	131	0	131	0.11	100
1974	2019	133	2	135	0.07	98
1975	1436	40	0	40	0.03	100
1976	1128	30	0	30	0.03	100
1977	1775	78	1	79	0.04	97
1978	1786	99	1	100	0.06	99
1979	1332	125	0	125	0.09	100
1980	1546	102	1	103	0.07	99
1981	1348	123	2	125	0.09	98
1982	1621	155	10	165	0.10	92
1983	1804	139	34	173	0.10	82
1984	1381	96	4	100	0.07	97
1985	1635	112	0	112	0.07	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	1540.0	113.0	10.2	133.2	0.09	92.66
$\bar{x}\pm$95%cl	±230.9	±30.7	±17.0	±42.4	±0.01	±7.37
n	5	5	5	5	5	5
75-84	1515.7	98.7	5.3	104.0	0.07	95.08
$\bar{x}\pm$95%cl	±163.8	±28.8	±7.5	±33.3	±0.01	±5.24
n	10	10	10	10	10	10
74-84	1561.5	101.8	5.0	106.8	0.07	95.45
$\bar{x}\pm$95%cl	±178.0	±26.6	±6.7	±30.3	±0.01	±4.74
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 21. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA F, 1953-85.

STATISTICAL AREA: F

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	50	6	0	6	0.12	.
1954	.	.	.	.	.	.
1955	.	.	.	.	.	.
1956	.	.	.	.	.	.
1957	.	.	.	.	.	.
1958	.	.	.	.	.	.
1959	.	.	.	.	.	.
1960	.	.	.	.	.	.
1961	.	.	.	.	.	.
1962	.	.	.	.	.	.
1963	.	.	.	.	.	.
1964	.	.	.	.	.	.
1965	17	44	6	50	2.94	.
1966	100	32	2	34	0.34	96
1967	.	.	.	.	.	.
1968	166	22	0	22	0.13	.
1969	16	12	0	12	0.75	100
1970	.	.	.	.	.	.
1971	290	25	9	34	0.12	.
1972	270	28	0	28	0.10	100
1973	410	94	4	98	0.24	88
1974	659	51	0	51	0.08	100
1975	527	87	0	87	0.17	100
1976	514	80	0	80	0.16	100
1977	530	81	0	81	0.15	100
1978	269	44	0	44	0.16	100
1979	331	100	0	100	0.30	100
1980	316	120	0	120	0.38	100
1981	384	77	0	77	0.20	100
1982	538	85	9	94	0.17	90
1983	414	41	5	46	0.11	94
1984	357	79	0	79	0.22	100
1985	611	103	0	103	0.17	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	401.8	80.4	2.8	83.2	0.21	96.80
$\bar{X}\pm$95%cl	$\pm$104.5	$\pm$34.8	$\pm$5.0	$\pm$33.4	$\pm$0.07	$\pm$4.20
n	5	5	5	5	5	5
75-84	418.0	79.4	1.4	80.8	0.19	98.21
$\bar{X}\pm$95%cl	$\pm$72.7	$\pm$16.6	$\pm$2.2	$\pm$16.3	$\pm$0.04	$\pm$2.42
n	10	10	10	10	10	10
74-84	439.9	76.8	1.3	78.1	0.18	98.40
$\bar{X}\pm$95%cl	$\pm$81.1	$\pm$15.9	$\pm$1.9	$\pm$15.7	$\pm$0.04	$\pm$2.18
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2j. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA G, 1953-85.

STATISTICAL AREA: G

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	3012	1954	44	1998	0.66	.
1954	1712	617	32	649	0.38	98
1955	1701	673	36	709	0.42	94
1956	2411	1319	22	1341	0.56	97
1957	2602	1355	48	1403	0.54	96
1958	3094	1350	51	1401	0.45	96
1959	3557	1447	52	1499	0.42	96
1960	4223	937	46	983	0.23	97
1961	2681	705	17	722	0.27	98
1962	3685	1002	38	1040	0.28	95
1963	4311	1620	48	1668	0.39	95
1964	6044	1295	23	1318	0.22	99
1965	5214	1852	76	1928	0.37	94
1966	3416	822	13	835	0.24	99
1967	7421	900	17	917	0.12	98
1968	5264	1105	1	1106	0.21	100
1969	6976	1422	9	1431	0.21	99
1970	7701	1893	12	1905	0.25	99
1971	6704	1620	19	1639	0.24	99
1972	5633	1139	8	1147	0.20	100
1973	7660	2160	20	2180	0.28	98
1974	9162	1494	9	1503	0.16	100
1975	10046	1872	6	1878	0.19	100
1976	8809	1623	12	1635	0.19	99
1977	8766	1080	9	1089	0.12	99
1978	7224	1303	17	1320	0.18	98
1979	5859	1704	15	1719	0.29	99
1980	6446	2379	61	2440	0.38	97
1981	6343	1862	52	1914	0.30	98
1982	8574	1825	33	1858	0.22	98
1983	10754	2303	71	2374	0.22	96
1984	8754	2264	5	2269	0.26	100
1985	9385	1750	0	1750	0.19	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	8174.2	2126.6	44.4	2171.0	0.27	97.84
$\bar{X}\pm$95%cl	±2280.3	±325.3	±32.3	±332.7	±0.05	±1.25
n	5	5	5	5	5	5
75-84	8157.5	1821.5	28.1	1849.6	0.23	98.41
$\bar{X}\pm$95%cl	±1168.3	±302.9	±17.6	±313.3	±0.04	±0.81
n	10	10	10	10	10	10
74-84	8248.8	1791.7	26.4	1818.1	0.22	98.54
$\bar{X}\pm$95%cl	±1060.6	±277.9	±16.1	±287.8	±0.03	±0.76
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2k. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA H, 1953-85.

STATISTICAL AREA: H

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	2216	712	44	756	0.34	.
1954	1486	356	37	393	0.26	95
1955	1584	306	29	335	0.21	92
1956	2814	425	14	439	0.16	96
1957	2064	484	30	514	0.25	93
1958	3046	1043	65	1108	0.36	88
1959	2525	657	33	690	0.27	97
1960	2197	511	23	534	0.24	97
1961	1507	236	2	238	0.16	100
1962	3658	679	68	747	0.20	78
1963	3785	1058	38	1096	0.29	95
1964	3507	1408	18	1426	0.41	98
1965	4591	875	43	918	0.20	97
1966	4334	820	22	842	0.19	98
1967	4942	333	4	337	0.07	100
1968	6641	1387	6	1393	0.21	98
1969	3800	979	29	1008	0.27	98
1970	3899	601	7	608	0.16	99
1971	4796	928	17	945	0.20	97
1972	5841	567	4	571	0.10	100
1973	8714	1785	42	1827	0.21	93
1974	10987	1212	14	1226	0.11	99
1975	5999	427	9	436	0.07	99
1976	8811	730	10	740	0.08	98
1977	7213	1097	5	1102	0.15	99
1978	8764	1595	42	1637	0.19	96
1979	6405	849	8	857	0.13	100
1980	9588	1524	27	1551	0.16	97
1981	9309	1317	29	1346	0.14	98
1982	9331	1256	10	1266	0.14	99
1983	9173	1140	79	1219	0.13	94
1984	6361	1457	2	1459	0.23	100
1985	6887	1326	0	1326	0.19	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	8752.4	1338.8	29.4	1368.2	0.16	97.64
$\bar{x}\pm$95%cl	±1670.3	±191.4	±37.2	±169.8	±0.02	±2.05
n	5	5	5	5	5	5
75-84	8095.4	1139.2	22.1	1161.3	0.14	98.06
$\bar{x}\pm$95%cl	±1022.4	±267.9	±16.9	±273.4	±0.02	±1.26
n	10	10	10	10	10	10
74-84	8358.3	1145.8	21.4	1167.2	0.14	98.22
$\bar{x}\pm$95%cl	±1083.0	±239.1	±15.2	±243.9	±0.02	±1.12
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 21. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA I, 1953-85.

STATISTICAL AREA: I

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	308	99	27	126	0.41	.
1954	130	75	2	77	0.59	98
1955	105	25	6	31	0.30	93
1956	225	65	9	74	0.33	74
1957	115	37	6	43	0.37	92
1958	189	107	11	118	0.62	77
1959	230	121	22	143	0.62	83
1960	242	89	11	100	0.41	92
1961	203	53	7	60	0.30	93
1962	352	197	10	207	0.59	84
1963	295	260	17	277	0.94	92
1964	677	483	7	490	0.72	97
1965	778	600	2	602	0.77	100
1966	416	355	5	360	0.87	99
1967	1271	579	7	586	0.46	98
1968	1579	1484	24	1508	0.96	96
1969	1739	3098	2	3100	1.78	100
1970	1770	2519	3	2522	1.42	100
1971	1580	1754	25	1779	1.13	99
1972	1599	1780	20	1800	1.13	99
1973	1836	1576	16	1592	0.87	99
1974	2415	1453	9	1462	0.61	99
1975	2410	975	4	979	0.41	100
1976	2796	1240	10	1250	0.45	99
1977	2873	1436	5	1441	0.50	100
1978	3339	1437	4	1441	0.43	100
1979	2834	912	3	915	0.32	100
1980	4231	1981	27	2008	0.47	97
1981	5206	2505	35	2540	0.49	98
1982	6159	1975	22	1997	0.32	99
1983	5271	1382	3	1385	0.26	100
1984	4763	1942	4	1946	0.41	100
1985	3935	1095	0	1095	0.28	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	5126.0	1957.0	18.2	1975.2	0.39	98.97
$\bar{x}$ ±95%cl	±883.9	±493.5	±17.6	±508.0	±0.08	±0.75
n	5	5	5	5	5	5
75-84	3988.2	1578.5	11.7	1590.2	0.40	99.24
$\bar{x}$ ±95%cl	±936.0	±362.5	±8.4	±369.4	±0.05	±0.45
n	10	10	10	10	10	10
74-84	3845.2	1567.1	11.5	1578.5	0.41	99.26
$\bar{x}$ ±95%cl	±892.7	±324.0	±7.5	±330.1	±0.05	±0.41
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2m. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL AREA J1, 1953-85.

STATISTICAL AREA: J1

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	530	343	30	373	0.70	.
1954	251	247	28	275	1.10	92
1955	180	389	39	428	2.38	86
1956	404	609	38	647	1.60	91
1957	503	452	32	484	0.96	95
1958	717	558	62	620	0.86	88
1959	831	618	24	642	0.77	96
1960	256	674	19	693	2.71	97
1961	837	590	70	660	0.79	91
1962	1190	1435	40	1475	1.24	94
1963	1082	1240	35	1275	1.18	98
1964	1396	1691	39	1730	1.24	97
1965	1559	1367	56	1423	0.91	97
1966	1945	1565	86	1651	0.85	94
1967	2054	807	53	860	0.42	97
1968	2784	2128	65	2193	0.79	93
1969	3211	2131	49	2180	0.68	98
1970	3123	1972	70	2042	0.65	97
1971	3772	1956	35	1991	0.53	98
1972	3364	2720	48	2768	0.82	98
1973	3800	2514	16	2530	0.67	99
1974	5757	2517	26	2543	0.44	99
1975	5028	2559	33	2592	0.52	99
1976	5092	2467	29	2496	0.49	99
1977	4356	2108	10	2118	0.49	100
1978	4143	2420	11	2431	0.59	99
1979	2720	1586	2	1588	0.58	100
1980	4896	2688	15	2703	0.55	99
1981	6093	3353	2	3355	0.55	100
1982	7174	3898	24	3922	0.55	99
1983	8561	2776	22	2798	0.33	99
1984	8199	3213	2	3215	0.39	100
1985	7377	3643	0	3643	0.49	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	6984.6	3185.6	13.0	3198.6	0.46	99.55
$\bar{x}$±95%cl	±1878.2	±605.6	±13.1	±606.4	±0.09	±0.29
n	5	5	5	5	5	5
75-84	5626.2	2706.8	15.0	2721.8	0.48	99.43
$\bar{x}$±95%cl	±1333.6	±469.3	±8.2	±470.5	±0.06	±0.26
n	10	10	10	10	10	10
74-84	5638.1	2689.5	16.0	2705.5	0.48	99.39
$\bar{x}$±95%cl	±1188.4	±419.9	±7.6	±420.7	±0.05	±0.25
n	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2n. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL SECTION 51, 1953-85.

STATISTICAL SECTION: 51

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	.	.	.	.	.	.
1954	.	.	.	.	.	.
1955	41	18	2	20	0.49	.
1956	101	20	0	20	0.20	100
1957	5	15	2	17	3.40	91
1958	25	49	0	49	1.96	100
1959	13	16	1	17	1.31	98
1960	31	46	4	50	1.61	80
1961	43	49	1	50	1.16	98
1962	26	42	2	44	1.69	96
1963	103	231	10	241	2.34	81
1964	175	202	32	234	1.34	88
1965	277	140	29	169	0.61	87
1966	50	88	7	95	1.90	95
1967	48	78	0	78	1.63	100
1968	50	46	0	46	0.92	100
1969	.	.	.	.	.	.
1970	109	201	5	206	1.89	.
1971	78	104	6	110	1.41	97
1972	52	58	2	60	1.15	98
1973	198	301	2	303	1.53	97
1974	312	232	3	235	0.75	99
1975	210	91	9	100	0.48	96
1976	324	179	11	190	0.59	89
1977	372	257	38	295	0.79	82
1978	301	154	26	180	0.60	91
1979	353	299	18	317	0.90	90
1980	240	198	45	243	1.01	87
1981	111	131	0	131	1.18	100
1982	268	114	11	125	0.47	92
1983	627	326	18	344	0.55	86
1984	489	168	2	170	0.35	99
1985	396	258	24	282	0.71	88
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	347.0	187.4	15.2	202.6	0.58	93
$\bar{x}$±95%cl	±257.4	±104.3	±22.5	±114.2	±0.21	±6.47
N	5	5	5	5	5	5
75-84	329.5	191.7	17.8	209.5	0.64	92
$\bar{x}$±95%cl	±104.2	±56.3	±10.5	±61.3	±0.14	±4.02
N	10	10	10	10	10	10
74-84	327.9	195.4	16.5	211.8	0.65	93
$\bar{x}$±95%cl	±92.9	±50.8	±9.8	±54.8	±0.13	±3.88
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2o. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL SECTION 52, 1953-85.

STATISTICAL SECTION: 52

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	.	.	.	.	.	.
1954	100	350	150	500	5.00	.
1955	157	107	6	113	0.72	98
1956	.	.	.	.	.	.
1957	337	1007	47	1054	3.13	.
1958	341	800	20	820	2.40	98
1959	487	807	36	843	1.73	96
1960	368	512	35	547	1.49	96
1961	591	664	125	789	1.34	80
1962	585	722	56	778	1.33	92
1963	591	1141	48	1189	2.01	94
1964	1364	1696	86	1782	1.31	93
1965	1271	1347	132	1479	1.16	93
1966	1833	1523	103	1626	0.89	93
1967	920	888	89	977	1.06	94
1968	1023	1893	87	1980	1.94	91
1969	1619	1612	120	1732	1.07	94
1970	2221	1971	107	2078	0.94	94
1971	2038	2732	151	2883	1.41	93
1972	2066	2016	172	2188	1.06	94
1973	4330	5227	447	5674	1.31	82
1974	1998	1428	241	1669	0.84	96
1975	1574	2433	47	2480	1.58	97
1976	2007	2158	141	2299	1.15	95
1977	2135	1987	122	2109	0.99	95
1978	2840	1089	126	1215	0.43	94
1979	1730	2323	149	2472	1.43	88
1980	1521	1987	276	2263	1.49	89
1981	1320	2702	105	2807	2.13	95
1982	2111	1935	167	2102	1.00	94
1983	1807	1578	144	1722	0.95	93
1984	1810	1099	111	1210	0.67	93
1985	1360	1109	35	1144	0.84	97
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	1713.8	1860.2	160.6	2020.8	1.18	93
$\bar{x}$ ±95%cl	±376.5	±731.7	±85.9	±742.4	±0.43	±2.09
N	5	5	5	5	5	5
75-84	1885.5	1929.1	138.8	2067.9	1.10	93
$\bar{x}$ ±95%cl	±303.9	±383.2	±41.6	±381.2	±0.29	±1.44
N	10	10	10	10	10	10
74-84	1895.7	1883.5	148.1	2031.6	1.07	94
$\bar{x}$ ±95%cl	±271.7	±356.2	±42.5	±349.1	±0.27	±1.37
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 2p. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR STATISTICAL SECTION 53, 1953-85.

STATISTICAL SECTION: 53

YEAR	EFFORT ROD DAYS.	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	.	.	.	.	.	.
1954	.	.	.	.	.	.
1955	.	.	.	.	.	.
1956	.	.	.	.	.	.
1957	.	.	.	.	.	.
1958	.	.	.	.	.	.
1959	.	.	.	.	.	.
1960	.	.	.	.	.	.
1961	.	.	.	.	.	.
1962	.	.	.	.	.	.
1963	.	.	.	.	.	.
1964	44	18	3	21	0.48	.
1965	278	57	75	132	0.47	19
1966	397	367	252	619	1.56	18
1967	468	119	106	225	0.48	78
1968	748	192	222	414	0.55	35
1969	.	.	.	.	.	.
1970	420	275	129	404	0.96	.
1971	523	171	82	253	0.48	77
1972	690	450	170	620	0.90	50
1973	700	533	128	661	0.94	78
1974	469	101	268	369	0.79	67
1975	245	379	117	496	2.02	46
1976	928	891	368	1259	1.36	51
1977	809	688	533	1221	1.51	63
1978	694	875	432	1307	1.88	61
1979	1101	595	323	918	0.83	73
1980	711	677	231	908	1.28	72
1981	414	660	195	855	2.07	78
1982	742	784	363	1147	1.55	65
1983	694	468	136	604	0.87	85
1984	832	681	212	893	1.07	69
1985	946	642	135	777	0.82	83
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	678.6	654.0	227.4	881.4	1.30	74
$\bar{x}$±95%cl	±195.1	±142.6	±103.9	±239.6	±0.32	±7.61
N	5	5	5	5	5	5
75-84	717.0	669.8	291.0	960.8	1.34	68
$\bar{x}$±95%cl	±173.5	±115.7	±96.5	±195.8	±0.25	±5.98
N	10	10	10	10	10	10
74-84	694.5	618.1	288.9	907.0	1.31	68
$\bar{x}$±95%cl	±162.6	±154.6	±86.1	±211.7	±0.24	±5.47
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 3a. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR SALMONIER RIVER, 1953-85.

RIVER: SALMONIER RIVER CODE: 28016900

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	2015	1471	4	1475	0.73	.
1954	889	388	5	393	0.44	100
1955	881	390	0	390	0.44	100
1956	1153	764	0	764	0.66	100
1957	1053	494	1	495	0.47	100
1958	991	480	4	484	0.49	99
1959	1641	663	0	663	0.40	100
1960	1471	237	2	239	0.16	100
1961	949	261	0	261	0.28	100
1962	1318	448	1	449	0.34	100
1963	1662	865	0	865	0.52	100
1964	2104	793	0	793	0.38	100
1965	1945	929	0	929	0.48	100
1966	1278	469	0	469	0.37	100
1967	1909	371	0	371	0.19	100
1968	2123	618	0	618	0.29	100
1969	2508	888	3	891	0.36	100
1970	3271	1096	0	1096	0.34	100
1971	3024	848	0	848	0.28	100
1972	3042	790	0	790	0.26	100
1973	3938	1336	1	1337	0.34	100
1974	4257	981	1	982	0.23	100
1975	5468	1330	1	1331	0.24	100
1976	4221	769	2	771	0.18	100
1977	3231	460	1	461	0.14	100
1978	2393	367	1	368	0.15	100
1979	1898	539	2	541	0.29	99
1980	2609	1068	6	1074	0.41	99
1981	2090	622	1	623	0.30	100
1982	3123	713	4	717	0.23	99
1983	3867	1031	3	1034	0.27	100
1984	3514	873	1	874	0.25	100
1985	4090	784	0	784	0.19	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	3040.6	861.4	3.0	864.4	0.28	100
$\bar{x}\pm$95%cl	$\pm$878.8	$\pm$241.1	$\pm$2.6	$\pm$242.6	$\pm$0.05	$\pm$0.32
$\bar{N}$	5	5	5	5	5	5
75-84	3241.4	777.2	2.2	779.4	0.24	100
$\bar{x}\pm$95%cl	$\pm$778.0	$\pm$215.6	$\pm$1.2	$\pm$216.0	$\pm$0.04	$\pm$0.16
$\bar{N}$	10	10	10	10	10	10
74-84	3333.7	795.7	2.1	797.8	0.24	100
$\bar{x}\pm$95%cl	$\pm$723.0	$\pm$196.4	$\pm$1.1	$\pm$196.7	$\pm$0.03	$\pm$0.15
$\bar{N}$	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 3b. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR BIG BARACHOIS RIVER (SMB), 1953-85.

RIVER: BIG BARACHOIS RIVER (SMB) CODE: 28022100

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	60	9	0	9	0.15	.
1954	9	2	0	2	0.22	100
1955	57	0	0	0	0.00	100
1956	29	0	0	0	0.00	0
1957	30	6	0	6	0.20	0
1958	.	.	.	.	.	.
1959	21	9	0	9	0.43	.
1960	111	15	0	15	0.14	100
1961	101	38	0	38	0.38	100
1962	73	11	0	11	0.15	100
1963	70	5	0	5	0.07	100
1964	69	7	0	7	0.10	100
1965	3	2	0	2	0.67	100
1966	30	2	1	3	0.10	67
1967	43	19	0	19	0.44	100
1968	102	8	0	8	0.08	100
1969	333	7	0	7	0.02	100
1970	230	77	0	77	0.33	100
1971	145	27	0	27	0.19	100
1972	231	24	0	24	0.10	100
1973	103	52	0	52	0.50	100
1974	360	18	1	19	0.05	98
1975	347	63	0	63	0.18	100
1976	326	72	1	73	0.22	98
1977	327	52	0	52	0.16	100
1978	234	109	0	109	0.47	100
1979	215	75	0	75	0.35	100
1980	289	124	0	124	0.43	100
1981	293	98	1	99	0.34	99
1982	288	44	0	44	0.15	100
1983	423	87	0	87	0.21	100
1984	343	62	0	62	0.18	100
1985	262	21	0	21	0.08	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	327.2	83.0	0.2	83.2	0.25	100
$\bar{x}\pm$95%cl	$\pm$72.3	$\pm$38.6	$\pm$0.5	$\pm$38.8	$\pm$0.09	$\pm$0.40
N	5	5	5	5	5	5
75-84	308.5	78.6	0.2	78.8	0.26	100
$\bar{x}\pm$95%cl	$\pm$42.4	$\pm$18.3	$\pm$0.3	$\pm$18.3	$\pm$0.06	$\pm$0.33
N	10	10	10	10	10	10
74-84	313.2	73.1	0.3	73.4	0.23	100
$\bar{x}\pm$95%cl	$\pm$39.2	$\pm$20.4	$\pm$0.3	$\pm$20.3	$\pm$0.07	$\pm$0.37
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 3c. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR BRANCH RIVER, 1953-85.

RIVER: BRANCH RIVER CODE: 28023800

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	228	88	23	111	0.49	.
1954	115	44	12	56	0.49	88
1955	132	29	14	43	0.33	76
1956	103	60	11	71	0.69	72
1957	256	106	20	126	0.49	75
1958	200	125	9	134	0.67	92
1959	180	52	0	52	0.29	100
1960	306	104	20	124	0.41	72
1961	375	103	15	118	0.31	87
1962	513	120	19	139	0.27	84
1963	605	64	11	75	0.12	92
1964	755	75	8	83	0.11	89
1965	481	125	26	151	0.31	74
1966	511	57	4	61	0.12	97
1967	631	76	4	80	0.13	93
1968	1035	52	0	52	0.05	100
1969	1214	84	0	84	0.07	100
1970	1626	144	0	144	0.09	100
1971	1081	166	8	174	0.16	95
1972	620	57	4	61	0.10	98
1973	1091	65	3	68	0.06	95
1974	1342	69	2	71	0.05	97
1975	756	25	1	26	0.03	99
1976	845	129	3	132	0.16	89
1977	776	64	4	68	0.09	97
1978	875	248	11	259	0.30	85
1979	876	184	7	191	0.22	97
1980	983	124	3	127	0.13	98
1981	722	234	4	238	0.33	97
1982	1403	189	0	189	0.13	100
1983	1537	374	9	383	0.25	95
1984	1051	369	4	373	0.35	99
1985	1107	180	0	180	0.16	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	1139.2	258.0	4.0	262.0	0.23	98
$\bar{x}\pm$95%cl	±409.0	±137.5	±4.0	±140.3	±0.08	±1.48
N	5	5	5	5	5	5
75-84	982.4	194.0	4.6	198.6	0.20	97
$\bar{x}\pm$95%cl	±198.4	±83.3	±2.4	±84.7	±0.06	±1.66
N	10	10	10	10	10	10
74-84	1015.1	182.6	4.4	187.0	0.18	97
$\bar{x}\pm$95%cl	±191.2	±78.4	±2.2	±79.7	±0.06	±1.59
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 3d. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR GARNISH RIVER, 1953-85.

RIVER: GARNISH RIVER CODE: 33084400

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	38	8	0	8	0.21	.
1954	14	3	0	3	0.21	100
1955	1	0	0	0	0.00	100
1956	16	7	0	7	0.44	0
1957	.	.	.	.	.	.
1958	20	11	0	11	0.55	.
1959	17	17	0	17	1.00	100
1960	49	9	0	9	0.18	100
1961	28	5	0	5	0.18	100
1962	94	33	0	33	0.35	100
1963	28	15	0	15	0.54	100
1964	110	54	0	54	0.49	100
1965	231	91	0	91	0.39	100
1966	144	61	0	61	0.42	100
1967	656	389	0	389	0.59	100
1968	970	977	0	977	1.01	100
1969	1263	2637	0	2637	2.09	100
1970	1318	2071	1	2072	1.57	100
1971	1154	1382	6	1388	1.20	100
1972	1144	1242	0	1242	1.09	100
1973	1223	1080	0	1080	0.88	100
1974	1117	1076	0	1076	0.96	100
1975	1214	646	0	646	0.53	100
1976	1334	675	2	677	0.51	100
1977	1719	1018	1	1019	0.59	100
1978	1530	770	2	772	0.50	100
1979	1340	596	1	597	0.45	100
1980	2015	1024	8	1032	0.51	99
1981	2246	1096	5	1101	0.49	100
1982	2960	1187	2	1189	0.40	100
1983	2507	712	0	712	0.28	100
1984	2339	856	0	856	0.37	100
1985	2001	563	0	563	0.28	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	2413.4	975.0	3.0	978.0	0.41	100
$\bar{x}\pm$95%cl	±438.9	±236.6	±4.3	±239.0	±0.07	±0.37
N	5	5	5	5	5	5
75-84	1920.4	858.0	2.1	860.1	0.45	100
$\bar{x}\pm$95%cl	±419.0	±149.7	±1.8	±150.6	±0.06	±0.19
N	10	10	10	10	10	10
74-84	1847.4	877.8	1.9	879.7	0.48	100
$\bar{x}\pm$95%cl	±407.2	±140.5	±1.6	±141.1	±0.08	±0.17
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 3e. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR LONG HARBOUR RIVER (FORTUNE BAY), 1953-85.

RIVER: LONG HARBOUR RIVER (FORTUNE BAY) CODE: 34097800

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	112	49	9	58	0.52	.
1954	68	31	2	33	0.49	96
1955	26	8	3	11	0.42	91
1956	64	49	2	51	0.80	80
1957	31	15	2	17	0.55	96
1958	55	65	3	68	1.24	83
1959	47	61	2	63	1.34	97
1960	29	58	1	59	2.03	98
1961	42	28	0	28	0.67	100
1962	102	129	3	132	1.29	90
1963	78	182	1	183	2.35	99
1964	255	386	5	391	1.53	97
1965	238	468	0	468	1.97	100
1966	84	274	1	275	3.27	100
1967	264	114	3	117	0.44	99
1968	246	269	9	278	1.13	93
1969	383	408	1	409	1.07	100
1970	359	391	2	393	1.09	100
1971	221	126	9	135	0.61	98
1972	210	338	1	339	1.61	99
1973	395	380	0	380	0.96	100
1974	310	120	3	123	0.40	99
1975	346	240	0	240	0.69	100
1976	422	438	7	445	1.05	97
1977	244	242	1	243	1.00	100
1978	404	396	0	396	0.98	100
1979	180	180	0	180	1.00	100
1980	425	593	1	594	1.40	99
1981	480	760	2	762	1.59	100
1982	614	431	1	432	0.70	100
1983	883	409	0	409	0.46	100
1984	810	765	0	765	0.94	100
1985	680	354	0	354	0.52	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	642.4	591.6	0.8	592.4	0.92	100
$\bar{x}\pm$95%cl	±248.6	±212.8	±1.0	±213.1	±0.38	±0.14
N	5	5	5	5	5	5
75-84	480.8	445.4	1.2	446.6	0.93	100
$\bar{x}\pm$95%cl	±162.6	±147.1	±1.5	±147.3	±0.24	±0.36
N	10	10	10	10	10	10
74-84	465.3	415.8	1.4	417.2	0.90	100
$\bar{x}\pm$95%cl	±148.9	±146.7	±1.4	±146.7	±0.23	±0.34
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 3f. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR BAY DU NORD RIVER, 1953-85.

RIVER: BAY DU NORD RIVER CODE: 34107900

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	100	17	6	23	0.23	.
1954	11	3	0	3	0.27	100
1955	29	9	3	12	0.41	50
1956	46	7	7	14	0.30	56
1957	67	18	3	21	0.31	70
1958	73	30	6	36	0.49	75
1959	166	43	20	63	0.38	60
1960	145	22	9	31	0.21	83
1961	133	20	7	27	0.20	76
1962	149	35	7	42	0.28	74
1963	158	59	16	75	0.47	69
1964	171	37	2	39	0.23	97
1965	48	20	2	22	0.46	95
1966	128	11	4	15	0.12	83
1967	32	23	4	27	0.84	73
1968	35	38	12	50	1.43	66
1969	26	44	1	45	1.73	97
1970	41	51	0	51	1.24	100
1971	32	46	6	52	1.63	89
1972	28	46	9	55	1.96	84
1973	45	97	16	113	2.51	74
1974	323	58	4	62	0.19	96
1975	277	52	4	56	0.20	94
1976	265	40	1	41	0.15	98
1977	154	45	0	45	0.29	100
1978	293	69	2	71	0.24	96
1979	191	34	2	36	0.19	97
1980	357	119	15	134	0.38	69
1981	567	186	5	191	0.34	96
1982	765	105	19	124	0.16	91
1983	683	80	2	82	0.12	98
1984	528	114	4	118	0.22	95
1985	425	50	0	50	0.12	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	580.0	120.8	9.0	129.8	0.22	92
$\bar{x}\pm$95%cl	$\pm$193.7	$\pm$48.9	$\pm$9.3	$\pm$48.9	$\pm$0.09	$\pm$5.49
N	5	5	5	5	5	5
75-84	408.0	84.4	5.4	89.8	0.22	94
$\bar{x}\pm$95%cl	$\pm$152.2	$\pm$33.8	$\pm$4.5	$\pm$36.1	$\pm$0.06	$\pm$3.71
N	10	10	10	10	10	10
74-84	400.3	82.0	5.3	87.3	0.22	94
$\bar{x}\pm$95%cl	$\pm$136.7	$\pm$30.6	$\pm$4.0	$\pm$32.7	$\pm$0.05	$\pm$3.35
N	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 3g. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR MAIN RIVER (SOPS ARM), 1953-85.

RIVER: MAIN RIVER (SOPS ARM) CODE: 04031100

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	17	10	1	11	0.65	.
1954	48	25	0	25	0.52	100
1955	.	.	.	.	.	.
1956	18	0	0	0	0.00	.
1957	4	2	0	2	0.50	0
1958	10	3	0	3	0.30	100
1959	40	5	0	5	0.13	100
1960	5	2	0	2	0.40	100
1961	110	24	0	24	0.22	100
1962	112	60	0	60	0.54	100
1963	164	89	0	89	0.54	100
1964	465	284	0	284	0.61	100
1965	666	538	4	542	0.81	99
1966	1350	911	20	931	0.69	96
1967	891	128	1	129	0.14	100
1968	1036	749	26	775	0.75	83
1969	1625	690	44	734	0.45	94
1970	832	472	1	473	0.57	100
1971	713	405	9	414	0.58	98
1972	703	281	0	281	0.40	100
1973	685	409	0	409	0.60	100
1974	797	464	0	464	0.58	100
1975	1231	782	0	782	0.64	100
1976	1082	501	0	501	0.46	100
1977	1041	693	0	693	0.67	100
1978	616	252	0	252	0.41	100
1979	830	983	0	983	1.18	100
1980	916	976	35	1011	1.10	97
1981	1098	1275	2	1277	1.16	100
1982	1848	1620	87	1707	0.92	94
1983	1812	482	1	483	0.27	100
1984	723	302	0	302	0.42	100
1985	1051	599	0	599	0.57	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	1279.4	931.0	25.0	956.0	0.75	98
$\bar{X}$±95%cl	±645.6	±677.9	±46.7	±713.6	±0.38	±2.86
$\bar{N}$	5	5	5	5	5	5
75-84	1119.7	786.6	12.5	799.1	0.71	98
$\bar{X}$±95%cl	±298.4	±311.9	±20.2	±326.7	±0.22	±1.94
$\bar{N}$	10	10	10	10	10	10
74-84	1090.4	757.3	11.4	768.6	0.70	99
$\bar{X}$±95%cl	±273.8	±285.4	±18.2	±298.9	±0.21	±1.86
$\bar{N}$	11	11	11	11	11	11

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR

APPENDIX 3h. SUMMARY OF RECREATIONAL ATLANTIC SALMON CATCH AND EFFORT DATA FOR CHARLES BROOK, 1953-85.

RIVER: CHARLES BROOK CODE: 07076600

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	.	.	.	.	.	.
1954	.	.	.	.	.	.
1955	.	.	.	.	.	.
1956	.	.	.	.	.	.
1957	.	.	.	.	.	.
1958	.	.	.	.	.	.
1959	.	.	.	.	.	.
1960	.	.	.	.	.	.
1961	.	.	.	.	.	.
1962	.	.	.	.	.	.
1963	.	.	.	.	.	.
1964	.	.	.	.	.	.
1965	.	.	.	.	.	.
1966	.	.	.	.	.	.
1967	.	.	.	.	.	.
1968	.	.	.	.	.	.
1969	.	.	.	.	.	.
1970	.	.	.	.	.	.
1971	.	.	.	.	.	.
1972	.	.	.	.	.	.
1973	.	.	.	.	.	.
1974	.	.	.	.	.	.
1975	.	.	.	.	.	.
1976	.	.	.	.	.	.
1977	.	.	.	.	.	.
1978	562	340	0	340	0.60	.
1979	71	26	0	26	0.37	100
1980	414	161	0	161	0.39	100
1981	471	275	0	275	0.58	100
1982	904	381	0	381	0.42	100
1983	533	316	0	316	0.59	100
1984	364	315	0	315	0.87	100
1985	240	21	0	21	0.09	100
MEANS, 95% CONFIDENCE LIMITS, N'S:						
80-84	537.2	289.6	0.0	289.6	0.54	100
$\bar{x}\pm$95%cl	$\pm$266.3	$\pm$100.9	$\pm$0.0	$\pm$100.9	$\pm$0.14	$\pm$0.00
N	5	5	5	5	5	5
75-84	474.1	259.1	0.0	259.1	0.55	100
$\bar{x}\pm$95%cl	$\pm$230.9	$\pm$114.5	$\pm$0.0	$\pm$114.5	$\pm$0.11	$\pm$0.00
N	7	7	7	7	7	6
74-84	474.1	259.1	0.0	259.1	0.55	100
$\bar{x}\pm$95%cl	$\pm$230.9	$\pm$114.5	$\pm$0.0	$\pm$114.5	$\pm$0.11	$\pm$0.00
N	7	7	7	7	7	6

PERCENT GRILSE IS CALCULATED BY SMOLT CLASS
IN THE ABOVE TABLE A PERIOD INDICATES NO DATA FOR THAT YEAR